

TWENTY-EIGHTH ANNUAL REPORT
OF THE
BOARD OF MANAGERS
OF THE
WILLARD STATE HOSPITAL
FOR THE YEAR 1896.

TRANSMITTED TO THE STATE COMMISSION IN LUNACY.

WYNKOOP HALLENBECK CRAWFORD CO.,
STATE PRINTERS,
ALBANY AND NEW YORK.
1897.

TWENTY-EIGHTH ANNUAL REPORT
OF THE
BOARD OF MANAGERS
OF THE
WILLARD STATE HOSPITAL
FOR THE YEAR 1896.

TRANSMITTED TO THE STATE COMMISSION IN LUNACY

WYNKOOP HALLENBECK CRAWFORD CO.,
STATE PRINTERS,
ALBANY AND NEW YORK.
1897.

OFFICERS OF THE HOSPITAL.

Managers.

HON. S. G. HADLEY, WATERLOO.

HON. S. H. HAMMOND, GENEVA.

A. S. STOTHOFF, ESQ., WATKINS.

JAS. A. FLANAGAN, ESQ., SENACA FALLS.

O. G. SHEARMAN, ESQ., PENN YANN.

S. G. VAN VLEET, ESQ., OVID.

HENRY PETERSON, ESQ., LODI.

PROF. J. L. MORRIS, ITHACA.

OFFICERS OF THE BOARD OF MANAGERS.

President.

HON. S. G. HADLEY, WATERLOO.

Secretary.

A. S. STOTHOFF, ESQ., WATKINS.

Treasurer.

HON. J. B. THOMAS, OVID.

RESIDENT OFFICERS.

Medical Superintendent.

WILLIAM MABON, M. D.

Assistant Physicians.

HENRY P. FROST, M. D. FRED'K E. BOWLBY, M. D.

SAMUEL F. MELLEN, M. D. CHAS. F. SANBORN, M. D.

GEORGE O'HANLON, M. D. ROBERT E. DORAN, M. D.

THOS. J. CURRIE, M. D. WILLIAM STEINACH, M. D.

Asst. Woman Physician.

J. ERNESTINE HILLS, M. D.

Medical Interne.

JOHN W. RUSSELL, M. D.

Matron.

JULIET W. WYMAN.

Steward.

MORRIS J. GILBERT.

REPORT OF THE MANAGERS.

To the State Commission in Lunacy:

The managers of the Willard State Hospital have the honor to submit herewith the twenty-eighth annual report of this institution, for the year ending September 30, 1896, together with the reports of the Superintendent and of the Treasurer for the same period of time.

There remained in the hospital October 1, 1895, 2,201 patients, of whom 1,028 were men and 1,173 women. During the year there were admitted 231 men and 299 women, or a total of 530.

The whole number under treatment was 1,259 men and 1,472 women, or a grand total of 2,731. The daily average population was 1,054 men and 1,146 women, or 2,200 in all.

There were discharged during the year 165 men and 318 women, a total of 283.

There remained October 1, 1896, 1,094 men and 1,154 women, or a population of 2,248.

The general health of our community has been good and the death rate, 6.5 per cent., like that of last year, has been unusually low. We are thankful that no death during the year has resulted from accident or suicide.

FINANCIAL STATEMENT.

The Treasurer reports that the total receipts of the hospital for maintenance during the year were \$343,949.73. The sum disbursed during the same period was \$340,021.14, and the balance on hand October 1, 1896, was \$3,928.59.

The classification of expenditures, which follows, shows the total cost of maintenance for various purposes, as well as the weekly per capita cost.

	Total cost.	Per capita
Officers' salaries	\$18,890 73	\$0.1651
Wages	126,648 15	1.1070
Provisions and stores.....	111,486 33	.9745
Ordinary repairs	5,113 14	.0447
Farm and grounds.....	6,785 20	.0593
Clothing	24,461 07	.2138
Furniture and bedding.....	8,291 42	.0725
Books and stationery	2,284 74	.0199
Fuel and lights.....	23,218 71	.2029
Medical supplies	2,172 67	.0190
Miscellaneous expenses	7,412 56	.0648
Transportation of patients.....	3,256 42	.0284
Total	<u>\$340,021 14</u>	<u>\$2.9719</u>

The weekly per capita cost of maintenance is thus seen to be 13 cents higher than during the preceding year, but the explanation is to be found in the increased wage rate paid to our employes by reason of the adoption of the uniform schedule which went into effect January 1, 1896. The number of employes remained about the same this year as last, but the amount paid for salaries and wages is \$18,380.67 greater. Should we deduct this amount from the total disbursements and compute on that basis, we would find the per capita to be 2.811 against 2.835 last year, or 2 cents less per week.

CONDITION OF BUILDINGS.

During the fiscal year just elapsed, active operations have progressed in the direction of new buildings and repairs, descriptions of which will be found in the Superintendent's report, appended.

The Laundry has been completed and is in working order. This is one of the best constructed and equipped buildings for this purpose ever erected in connection with a State hospital for the insane.

The completion of the building for storage purposes and shops provided us with quarters of sufficient dimensions to meet our needs in these departments. The removal of the sewing-room and the tailor shops to this building restored to the nurses and women employes the rooms occupied by them previous to the fire, and thus gave us additional accommodations.

Heat and power for the Laundry have been provided by the erection of a new Boiler-house and chimney and by installing two horizontal tubular boilers.

We have also erected during the year five covered railroad landing Stations and a Boathouse for the Hospital yacht.

In addition to these new structures the following repairs and betterments may be mentioned:

Rebuilding of bakery and boiler-house; improvements to railroad; laying Portland cement sidewalks and drains; installation of metallic circuit local telephone system, as well as a long distance line; rebuilding farm fences; reconstruction and equipment of main kitchen; repairs and equipment of kitchens at Branch, Infirmary, D. B. 2, D. B. 3 and D. B. 4; additions to fire department building, and purchase of hook and ladder truck and fire extinguishers; re-plumbing of D. B. 3; repairs to icehouses; re-arranging clothes-rooms and wardrobes at main building; Branch and Infirmary; reconstructing and furnishing employes' home; constructing and equipping bath-rooms for officers; providing wire screens and doors for all the dining-rooms and kitchens; erecting fire-escape stairway

at north wing; repairing extensively all wards at B. D. 1, also ward 8, north wing; placing steel ceilings in twelve wards, five day-rooms and four dormitories; tiling all waterclosets and corridors on wards 7, 8 and 9, north wing; painting barns, tenant houses, Superintendent's house, and outbuildings, as well as decorating many of the wards and corridors; equipping certain wards with additional heating apparatus, and providing new furniture, including chairs, carpets, lounges, settees, tables and pictures.

In an institution as old as this hospital, where buildings, cheaply constructed, have been in use many years, necessity for constant repairs, due to decay, impresses itself continually upon managers, official visitors and officers. Many of our buildings are now in a condition where radical measures should be taken for their reconstruction. Should these improvements be delayed longer the structures will pass into a state of decay beyond repair.

Notwithstanding the fact that our hospital is sorely in need of modern sanitary improvements, the general health of the patients has been good during the year. Since May the population has been the largest in the history of the institution, but no unusual outbreak of sickness has visited us.

NEW BUILDINGS NEEDED.

For three years past efforts have been made to secure an apportionment for a hospital for acute cases. Each year makes this demand more urgent.

Two bath-houses (the necessity for which is described in the Superintendent's report) would contribute inestimable advantage to the health and comfort of our patients. It is hoped a sum will be allowed for this purpose.

We also hope that a sufficient amount will be given for a cold storage plant, which is another important need. We are unable,

with our present accommodations, to preserve safely the large quantities of perishable supplies. The present structure was built when our population was smaller, and it is now decayed and utterly inadequate. At present we provide daily for more than 2,700 persons.

Last summer an allotment was made by the State Commission in Lunacy for erecting a cottage for working patients on the Lake farm; but, owing to more urgent needs in other directions, the sum was revoked. We ask that this amount be again granted, in order that we can more profitably manage this farm, which is somewhat removed from the hospital, and at the same time provide additional accommodations for thirty patients.

The need of a Silo has been emphasized during the past year by the shortage of our crops. This year we have rented additional land for pasturage. Should we use ensilage for fodder, the value of the acreage is practically increased about four times over old methods. The cost of this improvement is comparatively small, and in two years the saving accomplished would more than pay for it.

WORKING FORCE.

OFFICERS.

The officers have rendered faithful and efficient service with an eye single to the welfare of this great institution. The Superintendent and physicians have organized a medical society, and a weekly informal conference is also held. The object of these meetings is to promote the efficiency of the medical service and to stimulate scientific interest in all that pertains to the treatment and cure of the insane.

Important changes among the medical officers have taken place during the year. The resignation of Dr. Theodore H. Kellogg, men-

tion of which is made in our twenty-seventh annual report, took effect November 1, 1895. He was succeeded by Dr. William Mabon of the Utica State Hospital. Dr. Mabon had served for ten years as assistant physician, and was entirely familiar with the workings of the State Hospital system. His administrative ability, in the management of the hospital affairs during the past year, confirms the wisdom of our choice.

We regret to report that Dr. Mabon has seen fit to present his resignation, to take effect December 1st, he having been appointed Medical Superintendent of the St. Lawrence State Hospital at Ogdensburg.

Dr. George B. Wheeler died May 7, 1896. During his short service he gave evidence of being well qualified, professionally and otherwise, for his work. He was succeeded by Dr. William Steinach of New York city.

Dr. J. Ernestine Hills was appointed to fill the vacancy caused by the resignation of Dr. Caroline L. Bristol.

EMPLOYEES.

The attendants and employes, with few exceptions, have performed their duties cheerfully and conscientiously. The opening of the home for men attendants and employes and the restoration to use of the quarters for women, which were given over to the industrial department after the fire, together with the general increase of wages resulting from the operation of the uniform schedule, have insured a general feeling of contentment.

The training school for nurses is still maintained and a class of thirteen was graduated in May. As the new schedule of wages provides for two grades, viz., nurses and attendants, and with an increased compensation for the former, it follows that the quali-

fications for entrance to our schools should be of a higher standard than ever. Hereafter all applicants will be required to undergo a preliminary examination.

REQUIREMENTS.

We have carefully considered the following list of requirements, and trust that the necessary funds will be granted:

Increased water supply.....	\$20,000
Two bath-houses.....	25,000
Hospital for acute cases.....	25,000
Cottage for working patients.....	16,500
Cold storage.....	14,500
Heating apparatus.....	20,000
Electric light equipment.....	16,000
Plumbing.....	15,000
Piazzas.....	5,000
New floors.....	6,500
Sidewalks.....	1,500
Steel fence.....	7,500
Steel ceilings.....	3,000
Furniture.....	5,000
Painting.....	3,000
Machine shop and equipment.....	4,000
Tiling.....	5,000
Pathological laboratory.....	800
Farm implements and tile.....	750
Farm fences.....	1,200

The necessity for these improvements is described in full in the Superintendent's report.

Respectfully submitted,

STERLING G. HADLEY,
S. H. HAMMOND,
A. S. STOTHOFF,
JAMES A. FLANNAGAN,
O. G. SHEARMAN,
JNO. L. MORRIS,
S. G. VAN VLEET,
HENRY PETERSON.

Report of the Treasurer.

To the Managers of Willard State Hospital:

The treasurer of the Willard State Hospital respectfully submits the following statement of his receipts and payments for the year ending September 30, 1896:

Receipts.

Balance on hand September 30, 1895.....	\$10,800 04
Cash received from State Comptroller, general funds.....	317,561 43
Cash received from State Comptroller, special funds.....	120,226 55
Cash received from private patients.....	1,939 11
Cash received from reimbursing patients.....	14,332 49
Cash received from M. J. Gilbert, steward, for:	
Attendants' uniforms.....	240 95
Old material.....	3,871 08
Farm and grounds.....	615 40
Cash refunded.....	75
Telephone tickets.....	9 50
L. V. R. R., unused ticket.....	5 70
Rents.....	224 50
Interest, received on deposit.....	309 45
Total.....	<u>\$470,136 95</u>

Payments.

Vouchers, paid from general fund.....	\$340,021 14
Vouchers, paid from special funds.....	126,187 22
Balance on hand September 30, 1896.....	3,928 59
Total.....	<u>\$470,136 95</u>

J. B. THOMAS,
Treasurer.

Report of the Superintendent.

To the Board of Managers of the Willard State Hospital:

Gentlemen.— In accordance with the law, I beg leave to submit for your consideration the following report of the Willard State Hospital for the year ending September 30, 1896.

MOVEMENT OF POPULATION.

October 1, 1895, there remained in this hospital 2,201 patients. Of these 1,028 were men and 1,173 women. There were admitted during the year 231 men and 299 women, making a total of 530.

The total number treated during the year was 2,731, or 1,259 men and 1,472 women. The daily average population was 1,054 men and 1,146 women, or 2,200 in all.

The discharges during the year included 165 men and 318 women, or a total of 483. Of those discharged, 34 men and 45 women, or 79 in all, had recovered; and 18 men and 30 women, or a total of 48, had improved; 39 men and 173 women, or 212 in all, had not improved, and 79 men and 70 women, 149 in all, died.

There remained October 1, 1896, 1,094 men and 1,154 women, or a resident population of 2,248.

The capacity of the hospital has been increased during the year to 2,270. We now have accommodations for 1,104 men and 1,166 women.

The statistical tables show an increase during the year of 66 men and a decrease of 19 women, making the total increase 47. The largest number present on any day of the year was 2,266, and the smallest number 2,046.

Of the 530 patients admitted during the year, 183 were brought directly from their homes, 14 came from almshouses, 12 from hotels, 2 from sanitariums, 22 from jails, 4 from city hospitals, 283 were transferred from other New York State hospitals, 2 were received from physicians' offices, 1 from a judge's office, 5 from the Soldiers' Home, 1 from a superintendent of the poor's residence, and 1 was found upon the streets.

Of the 530 admitted, 527 were public and 3 were private patients. There remained at the end of the year 8 private patients.

No patient admitted was under 15 years of age. Five and nine tenths per cent. of the whole number were over 70 and of these 8 were over 80. The largest number were between 40 and 50 years old, and the second largest between 50 and 60.

The percentage of recoveries, calculated upon the daily average population, was 3.6 per cent.; if computed upon the whole number of admissions it would be 14.9 per cent. If we eliminate from the admissions those cases whose insanity was of over a year's duration, we find that the rate of recoveries was 50 per cent. This last percentage emphasizes the importance of early hospital treatment. Our recovery rate, based on admissions, has undoubtedly been lowered by the large number of transfers received during the year from other State hospitals, the proportion of these transfers being 53.40 per cent. of the whole number admitted.

Of the 339 patients discharged, 205 were transferred to other New York State hospitals, and one to the Kankakee (Illinois) hospital; 63 were discharged at the expiration of parole; 60 went directly to their own homes; 7 eloped; 2 were released on judge's orders, and one went with relatives to Massachusetts.

The death rate remains the same as last year, and is unusually

low, being 6.50 per cent. We are glad to be able to record that no fatal accident and no suicide has occurred.

METHOD OF TREATMENT.

AMUSEMENTS.—During the year amusements for the patients have been liberally provided. In winter, beside the weekly dances, theatricals, concerts, lectures and card parties have contributed much to brighten the daily routine of the patients' lives. On pleasant summer days the steam yacht "Nautilus" has been used for the pleasure of the inmates to a greater extent than ever before, averaging two daily trips twice a week, and each time carrying from fifty to seventy persons.

Baseball has been played on Saturday afternoons during the summer, accompanied by the music of the hospital band, which also has given weekly concerts on the lawns.

The annual field sports were held on the new athletic grounds and were more than usually successful, the new cinder path affording excellent advantages for bicycle and running races. The location of this field made it possible for every patient to get an unobstructed view of all the contests.

The school continues to be an important factor in the hospital life, particularly for some of the convalescent and quiet chronic classes. The teacher, Dr. Hamlin, has worked faithfully and obtained gratifying results. The pupils, under his direction, have given two interesting public entertainments.

OPEN WARDS.—One or more wards in each building have been opened, thus giving increased liberty to the inmates during certain hours. In inaugurating such a departure, there always are those who will take advantage of their privilege, but these are

comparatively few, and by much the greater number the personal liberty accorded them has been much appreciated.

OCCUPATION.—Since most of our population is drawn from the agricultural and laboring classes, with comparatively few skilled in trades, it has always been our custom to employ a large number of patients about the farm, garden and grounds, as well as in the ordinary ward work. The destruction of the workshops by fire has necessarily, for over a year, limited our available space for indoor employment. In our new storage-house, however, some of the old industries can be pursued in more spacious quarters. Mattress making, upholstering, and repairing shoes have been carried on under the management of the upholsterer, and we hope during the year to revive some of the simpler employments which have proved beneficial in other State hospitals.

Women are employed in the laundry, tailor shop, sewing-room, kitchens, and in the usual ward work. These simple household occupations are carried on not so much for reason of economy as for the benefit derived by patients from the exercise of mind and body.

MEDICAL TREATMENT.

As much as possible has been done to stimulate interest among the medical staff in its work, and to encourage clinical observations and research. With this object in view, early in the year a medical society was organized. Once a month we met and original papers and abstracts from the medical journals were read and discussed. An informal weekly conference was also held, where individual cases and administrative questions were considered.

A thorough physical examination, including that of the blood and urine, is now made in all new cases, and any therapeutic agent

which might help the class of unfortunates under our care has been administered.

In this connection I would refer to the use of thyroid extract. In the twenty-nine cases treated with this remedy, those suffering from acute melancholia did not receive any marked benefit, but in melancholia and mania of long duration where recovery was retarded and had become somewhat doubtful, the results are more encouraging. A longer trial of this drug is, to our mind, necessary to establish its exact value in the treatment of the insane.

Red bone marrow in the form of carnogen has also been tried and appears to be especially beneficial in cases of anaemia and much debilitation.

Aiming as we do to make use of every available means of treatment at our command, we have secured the services of Dr. J. S. Kirkendall, of Ithaca, a distinguished and skillful ophthalmologist, to make careful study and examination of the eyes of our patients. With the co-operation of the State Commission in Lunacy, we have purchased a complete outfit for this department, and since July have been prosecuting this specialty. It has been found that many patients suffer from various degrees of eye strain, and already a large number have been relieved of severe headache and other distressing symptoms. One man, in particular, who had long suffered from a marked astigmatism, is now able to read with comfort, which formerly he could not do.

I desire to record my appreciation of Dr. Kirkendall's valuable services, and to state that his observations are being tabulated and that the outcome will be published in the State Hospital's Bulletin. It is probable that in the course of a few months one or more of the official staff of this hospital will be able to carry on these examinations.

TRAINING SCHOOL.

Last January the committee of State Hospital Superintendents, Drs. Wise, Blumer and Howard, held an examination for those applicants who wished to be classified under the new schedule as nurses. Seven men and four women, a total of eleven, successfully sustained the examination. In May two men and eleven women, a total of thirteen, were graduated; and, at the junior examination, seven men and twenty-one women, twenty-eight in all, were advanced to the senior class.

It is intended hereafter that all who desire to enter the training school must undergo an examination to test their educational proficiency and to demonstrate that they have the necessary qualifications to pursue the two years' course of training.

The same method of instruction, by means of lectures and recitations, will be followed as formerly, but additional clinical and practical work will be required.

IMPROVEMENTS.

The following improvements, including new buildings and ordinary and extraordinary repairs, have been in progress during the past year:

The new Laundry, which was constructed with special reference to the future needs of a hospital of this size, has been completed. In order to obtain heat and power and secure drainage, it was necessary to enlarge the boiler-house at D. B. 2, install two new boilers, add a chimney 100 feet in height, build a conduit from the boiler-house, and lay a sewer to the lake. This laundry, with its complete equipment, should prove a model of its kind. The relief experienced from the inconvenience we have suffered since the destruction by fire of the old laundry, can scarcely be expressed. For

more than a year the work of this department has been carried on in temporary buildings and in the kitchens of the detached cottages.

The building for storage purposes and shops is now occupied. Herein are located the storerooms, matron's department and sewing-room, the tailor shop, shoe shop, and mattress and upholstering shop. Electric motors have been provided for running the machinery of the various departments of this building. Patients employed in this industrial home seem to appreciate their sunny and commodious quarters and pleasant surroundings.

The Bakery and Boiler-house have both been rebuilt and somewhat enlarged, making them far superior to the old buildings destroyed by fire.

A Boathouse has been constructed for the Hospital steam yacht "Nautilus," which will now be protected from the severe lake storms.

Covered landing Stations have been built at each of the detached buildings for the protection and temporary storage of daily supplies. They take the place of the old open platforms where stores were frequently spoiled by exposure in inclement weather.

The railroad within the Hospital grounds has been much improved by new and heavier rails, ties and switches.

Portland cement sidewalks in many places have been repaired and new sidewalks have been laid at the rear entrance of the main building, at the east of D. B. 4, and between the latter building and the laundry.

The old local telephone system has been replaced by one of modern construction, and includes a new switchboard and metallic circuit. A "Long Distance" line has been built to Seneca Falls, connecting there with the main line of communication.

The basements of D. B. 2, D. B. 4 and the Employes' Home have been thoroughly drained and connections with the outside drains have been made, thus protecting the foundations of these buildings.

In connection with the work about these premises, much grading has been accomplished; and in another year, it is hoped, these rough places will be transformed into handsome lawns.

The old athletic field west of Hadley Hall has been leveled and graded and a cinder track laid. This work, when completed, will add much to the beauty of the grounds.

The Steamboat Landing is now being thoroughly overhauled and when finished will be practically a new dock.

The Stable has been thoroughly repaired. New floors and ceilings have been put in where needed, and the entire roof shingled. An additional room has been built at the west entrance to provide sleeping accommodations for the stable man, and a room with cement floor (at east entrance), for washing carriages, etc., has been added.

The barns at the hotel and Branch have also been put in good repair.

The old storm fence east of the railroad cut has been entirely rebuilt, and work is now progressing on about three miles of new wire fence of the Page pattern.

An apportionment having been made for changes in the main kitchen, work is now in progress, and in the course of four weeks will probably be completed. The plans provide for arrangements along modern lines, the range and kettles being placed away from the walls, in such position as to enable us to keep this place neat and clean at all times. The location of the employes' dining-room has been changed, and it is now connected with the serving-room, which is provided with a steam table. With steel ceilings and

finely tiled floors, this culinary department and dining-room will be admirably adapted for our needs.

In addition to the structural changes, new apparatus has been provided, not only for this kitchen, but also for the ones at the Branch and Infirmary.

The building for the fire department has been enlarged to provide space for the hook and ladder truck. A room has been set aside for the electrician's workshop, and for the storage of electrical supplies.

A feed-room for the fire department horses has been constructed.

The hook and ladder truck, purchased last summer, has materially strengthened this department and affords greater security.

The law governing the protection of hospital buildings against fire has been complied with by the purchase of fifty additional extinguishers, which, with the old ones, complete our equipment.

Under the direction of W. Paul Gerhard, Esq., sanitary engineer, entire new plumbing has been placed in the wards of D. B. 3, according to the latest and most approved method. New earthenware closets, provided with automatic and chain flush, have replaced the unsightly and unhealthy hoppers.

The Huber spray baths, with thermometer attachment, have been introduced, thus preventing any accident by scalding. The operation of this system of baths is such that when a desired degree of temperature is obtained it is possible to maintain it without marked fluctuation.

The ice-houses have received needed repairs. One of these buildings is very old and in another year will have to be torn down and rebuilt.

All of the clothes-rooms in the main building have been reconstructed and arranged to meet the needs of this hospital. Work

along the same lines is now in progress at the Branch and Infirmary, It was found necessary to replaster the third floor of the Employees' Home before this building could be occupied. Newly furnished rooms, spray baths, a billiard, reading and smoking-room, furnish most cheerful and attractive quarters for the men attendants and employes after the labor and heat of the day. It is confidently expected that this new departure will exercise a far-reaching influence for good among the employes. The opening of this home gave us much needed sleeping accommodations for patients.

In all of the detached buildings the bath-rooms for officers, according to an old plan, were placed in the third story, and as time went on these have been used as general bath-rooms by the domestics and other employes located there. This arrangement was attended with great discomfort to all, and to remedy it, bath-rooms for the officers have been built on the second floor of D. B. 2, D. B. 3 and D. B. 4.

The bathroom in the steward's house has also been rearranged and provided with new fixtures.

Observing the recommendations of the State Commission in Lunacy, wire window screens and doors were placed in all the dining-rooms and kitchens of the hospital, thereby insuring greater cleanliness and adding much to the comfort of the patients.

A new fire escape stairway similar to those already in use has been placed at the end of the north wing.

The number of lights on the street circuit has been increased from time to time as necessity demanded.

Extensive repairs have been made to the woodwork and ceilings of D. B. 1. The walls are now being painted, and when finished this building will be much more comfortable for its inmates.

Ward 8, north wing, has been renovated throughout, including

new steel ceilings and side walls plastered with Portland cement and adamant. This method of plastering is well adapted for hard usage on wards occupied by disturbed patients.

The manager's room has been painted and decorated, new chairs and a rug have been purchased, and a cheerful brick fire place and mantle built.

Steel ceilings of neat design have been placed on seven wards and four dormitories of the main building and on five wards and day-rooms of the detached buildings.

Corridors and water-closets of wards 7, 8 and 9, north wing, have been neatly tiled.

During the spring and summer, the Superintendent's house, all the tenant houses, barns, stable, out buildings and the roof of Hadley Hall have been painted. Much work of this kind has also been done in the various wards and corridors.

Additional heating surface and radiators have been furnished in several wards of the Detached Buildings. We hope to continue this work this fall.

Out of the apportionment for furniture, carpets, chairs, lounges, settees, tables, pictures, etc., have been purchased.

SUGGESTIONS FOR THE COMING YEAR.

I respectfully call your attention to the pressing needs of this hospital for the coming year, and earnestly urge that effort be made to secure the necessary apportionments for the prosecution of the following improvements:

Increased water supply..... \$20,000.

The first and most crying need is for a new system of water supply for the Branch, Infirmary and Detached Building No. 3. Professor Eldridge, of Cornell University, has carefully considered this matter, as will be seen by his report, which follows:

"Report of an Investigation of the Present Water-works System at the Willard State Hospital at Willard, N. Y., together with Suggestions for a New System.

"The following report is intended to present briefly the condition of the present water-works system at the Willard State Hospital, Willard, N. Y., together with an outline of the proposed new system, with estimates for the same.

"LOCATION OF BUILDINGS.

"The Main Building of the Willard State Hospital is located on the shores of Seneca lake, while the majority of the buildings are situated along a central road running east from the lake, the distance from the lake to the farthest building being over one mile.

"NEEDS FOR A NEW SYSTEM.

"The present existing conditions for all buildings above the lake-water reservoir, as shown on the map, is such as to demand immediate attention. In case of fire they are absolutely without fire protection, save such as could be given by one or two cisterns and one steamer, as the upper reservoirs run dry during the summer months, while the water supply afforded by the upper reservoirs is at any time unfit for domestic purposes, as will be seen by the report.

"THE PRESENT WATER-WORKS SYSTEM.

"At present there are two distinct water-works systems which supply water for the buildings and grounds. The principal system consists of two Worthington pumps, situated on the shore of the lake, which force the lake water into a reservoir at an elevation of some 200 feet above the level of the lake. This water

is used for all buildings between the reservoir level and that of the lake. The other buildings, including the Branch, Infirmary, D. B. 3 and the barns, are supplied from three small reservoirs located some 4,300 feet east of the Branch. The location of the buildings to be supplied by the new system can be seen in drawing No. 1.

"The reservoirs supplying these buildings open one into the other, and are neither bricked or cemented, but are merely holes in the ground. They are supplied by a small creek whose source is at Ovid, about three miles east of Willard. This stream, which might have supplied plenty of water twenty years ago, is of no use to-day. The writer followed the course of the creek from the reservoirs to its source. He found that the lower reservoir contained about seven feet of black, muddy water. The second reservoir had about twelve to fifteen inches of water in the center of a large mud hole lined with dead fish. The third reservoir was perfectly dry, the bottom being covered with dead fish.

"Leaving the reservoirs, the creek wound through the fields, mostly pasture land. The bed of the creek in most places was perfectly dry. In other places it passed through swampy lands where at no time would there be much current to the water, making germ breeding places for disease. The writer also found barnyards, pig-yards and outhouses draining directly into the creek.

"So far as could be learned there are no sources of water supply that could be used to augment this worse than useless supply.

"The head of water at the Branch, due the creek reservoirs, is not over ten to twelve pounds, and will not reach the eaves of the building, thus making the natural head utterly useless for fire purposes, while the amount of water in the reservoirs would supply the fire engine but a short time.

“At the present time the buildings above the lake reservoir are supplied with water from the lake reservoir by means of a small pump at the reservoir. This, for fire purposes, would be entirely inadequate, and affords but false security.

“THE PROPOSED NEW SYSTEM.

“The lake-water reservoir, hereafter to be spoken of as the reservoir, is situated on the main road, some 3,000 feet from the lake, at an elevation of about 200 feet above the lake. Just east of the reservoir is the electric light plant, the fire department building and a small pump-house. It is proposed to take down the pump-house and to build a wing to the electric lighting plant for a pump-room. This will be so constructed that one man can take charge of both the lighting and pumping plants. The existing capacity of the boiler is sufficient to do the work of both lighting and pumping.

“THE PUMP.

“At this point it is proposed to locate a pump of 1,200,000 gallons capacity, the pump to be supplied with steam from boilers now in place and with water from the reservoir.

“THE COURSE OF THE PIPE LINE.

“Starting at the pump-house the piping will run north 112 feet, crossing the road, then west 930 feet with branches extending to D. B. 1, and to Hadley Hall. It will also extend east about 3,000 feet with connections for D. B. 3, the Infirmary and the Branch, ending at a stand pipe. There will also be a branch line commencing 1,763 feet east of the pump-house and extending 773 feet south, then west 900 feet, with connections for the barns, farmhouse, henery and the south end of D. B. 3.

“THE STAND PIPE.

“The present drawings provide for a stand pipe 10 feet in diameter and 45 feet high above its foundations, located just back of the Branch. The top of the stand pipe to be 25 feet above the eaves of the building, thus affording sufficient head for all domestic purposes, while for fire service a valve is provided at the stand pipe which can be closed, thus allowing the pressure at the pump to be increased over its normal pressure up to 150 pounds per square inch. For all buildings, save the Branch, the normal head would be sufficient at all times for fire service.

“The top of the stand pipe will be 177 feet above the level of the reservoir, giving a normal working pressure of about seventy-seven pounds at the pumps. The greatest pressure will come at Hadley Hall, located some 52 feet below the reservoir level, giving a head at Hadley Hall of 229 feet, or about ninety-eight pounds per square inch. The advisability of extending the line west to Hadley Hall and D. B. 1, is seen when we consider that the normal head due the reservoir at Hadley Hall is but twenty-two pounds, while the normal head at D. B. 1 is but fifteen pounds.

“EMERGENCY CONNECTIONS.

“At the west side of the reservoir connections will be made with a 12-inch pipe leading directly from the lake pumps to the main line of the new system. These connections should not be used except in case of accident at the reservoir plant, when direct connection could be made with the lake pumps and the lake water forced directly to the stand pipe.

“WATER-WORKS SYSTEMS.

“There are three principal water-works systems, each having its advantages and disadvantages and each its advocates. They

may be classified as the Reservoir, the Stand pipe or Tank, and the Direct Pumping Systems.

“ The reservoir is undoubtedly the best system where it can be used, but has as its disadvantages, its great first cost.

“ The stand-pipe system can be classified as the next best system and can be used, as in the present case, where it would be next to impossible to construct a reservoir without going to great expense. Its advantages over the direct system are: The constant pressure possible throughout the system, less liability to water hammer, thus less liability to breakage, and, therefore, is a more reliable system in case of emergency, and will bring repairs down to a minimum. It has all the advantages of the direct system in that by the closing of one valve the pressure can be increased throughout the system to any desirable amount.

“ The only real disadvantage of the stand pipe system over the reservoir system is that the stand-pipe can not store up a large quantity of water to be used while the pumps are shut down.

“ Even this disadvantage is not as real as it appears, for the pumps must be kept working in the reservoir system in case of a large demand for water, or the supply in the reservoir will soon be exhausted.

“ The direct system pumps directly into the mains and relies wholly on pump-governors and safety valves to take care of the pressure carried, and the water pumped. Undoubtedly it is the cheapest system to construct, but experience has shown that the pressures carried are not as uniform as in the other systems, and also that the dangers arising from water hammer and breakage are greater than either of the other systems, making the cost of repairs greater than in either the reservoir or stand pipe systems.

“ THE CAPACITY OF THE PRESENT BOILERS AND PUMPS.

“At the pumping station situated at the lake are two Worthington pumps of 3,500,000 gallons capacity in twenty-four hours. Either pump, during the past season, was of sufficient capacity to supply all the buildings and grounds with the exception of the Branch, which was not piped up to the reservoir at the electric light station.

“ This building receives its supply from the old reservoirs. By adding this building to the system, an additional amount of water, from 12,000 to 15,000 gallons per twenty-four hours would have to be supplied. This could be done by slightly increasing the service of the pump working or by running both pumps together for a short period each day when the demand for water is greatest.

“ The boiler capacity at the Electric Light Station is ample, none of the boilers being used during the daytime when the pump would be called upon for its greatest service, while up to the present time but two or three boilers have ever been used at any one time.”

Bath-houses \$25,000.

The bathing facilities in this hospital are generally antique and defective. From an economical and hygienic standpoint it would be advantageous to the hospital to erect two bathhouses, one in connection with the north and the other with the south wing of the main building. I would recommend that the buildings be two stories high, the first story to be used for bathing and dressing-rooms, and the second for clothing-rooms. With increased facilities, patients could be bathed more frequently and expeditiously, and the person in charge could also care for the clothes-rooms.

Piazzas \$5,000.

All of the Detached Buildings are severely plain, and much could be done at small expense to make them attractive by erecting piazzas. Should we do this, it would be possible for the aged and

infirm to receive the incalculable blessing of air and sunshine, while at the same time a protection to all on rainy summer days would be afforded.

New floors..... \$6,500.

The floors at D. B. 2 and D. B. 4 are practically worn out, being rotten and sagging everywhere, and in many places the supports are decayed and dangerous. The work of renovation can not longer be delayed, and new floors should be laid at the earliest practicable date.

Hospital for acute cases..... \$25,000.

I would emphasize the necessity for this building. The Willard Hospital was primarily constructed for the custodial care of the chronic insane, and no special provision has ever been made for the scientific treatment and care of acute cases. Since, under the State Care Act, we are now receiving large numbers of the latter class, provisions should be made for their speedy restoration to health.

Sidewalks..... \$1,500.

We desire to prosecute the work of laying cement sidewalks and gutters, and the sum named will be ample for this purpose.

Heating apparatus..... \$20,000.

The heating and ventilation of the Main Building is so defective as to require the introduction of an entirely new system. During severe weather it is impossible to heat certain wards, and the inmates have to be transferred to other wards to insure any degree of comfort.

Cold storage.....\$14,500.

The present quarters for the meat supplies are entirely too limited. I would urge that the sum above named be allowed for the purpose of cold storage, in order that a building might be erected

and a refrigerating plant installed, such as would meet our requirements, not only for the present, but also for the future. This sum is a moderate estimate when we consider the large population of the institution and the great quantities of meat which have to be stored. In addition, a building of this kind would provide a proper place for the storage of butter, eggs, fruit and other perishable products.

Plumbing \$15,000.

Each year one or more of the Detached Buildings should have all the old and foul plumbing removed and new substituted. The unsanitary and old fixtures require more water for the flushing than modern ones, and the introduction of the latter would result in marked economy at our pumping station.

On many of the wards of the main building the plumbing is as poor as can be found in the State, and the only wonder is that more sickness has not resulted therefrom.

Electric light station \$16,000.

Two new direct connected dynamos and an engine should be installed in our electric light station to provide for the increased number of lamps required. The present plant is now inadequate to the needs of the institution.

Cottage for working patients \$16,500.

We can increase our accommodations by erecting a cottage for working patients on the lake farm, where we have about two hundred acres of land. The farm-house now located there is too old and dilapidated to permit rebuilding and enlarging. At a per capita of \$550 such a building could be constructed for thirty patients for the above mentioned sum.

Steel fence \$7,250.

During the summer months the hospital grounds are overrun with visitors who do not always manifest proper consideration for our patients, but do display an unrestrained morbid curiosity to see those who are not proper subjects for the gaze of mere sightseers. Excursionists land at the steamboat dock, and, unless carefully watched, use the ground for picnic purposes, scattering papers and rubbish in their path. The wooden fence at the north of the garden is no protection against marauders who climb over or under and help themselves to vegetables and fruit, despite the efforts of policemen and attendants. These annoyances could be overcome by erecting a steel fence eight feet high, with sharpened pickets, extending from the lake to the public highway east of the infirmary. It is estimated that such a fence would cost \$1 a foot, including gates, posts, etc.

Steel ceilings..... \$3,000.

Many of the wards and day-rooms in the cottages should be provided with steel ceilings, as the plastering is so old and loose as to be a constant source of danger to the occupants.

Furniture..... \$5,000.

Much remains to be done in furnishing. The constant wear and tear upon furniture by the population of a hospital for the insane necessitates frequent renewals, and here, as elsewhere, it is economical in the long run to purchase the best.

Painting..... \$3,000.

All the buildings for patients on the hospital premises are much in need of painting, inside and out. If this sum is allowed it will greatly improve their condition from all points of view.

Pathological laboratory..... \$800.

This sum is asked for the equipment of a laboratory for the care and preservation of specimens, and for pathological research, which, with our present appliances, is confined within quite too narrow limits.

Machine shop and equipment..... \$4,000.

The present machine shop is inadequate for our growing needs and increasing population. It occupies room which should properly belong to the carpenter and other mechanics. The old gas-house could be utilized for this purpose, and \$1,000 would make the necessary alterations. When this change is made, the equipment should be increased by the purchase of a machine capable of cutting pipe from four to twelve inches, which would cost \$2,400. A lathe could also be obtained at an approximate cost of \$600.

Tiling..... \$5,000.

Tile floors should be laid in the kitchen of D. B. 1 and the Infirmary, as well as in some of the dining-rooms of the cottages. These latter places, with their old, decayed and water-soaked floors, it is now almost impossible to keep clean.

Farm fences..... \$1,200.

More wire fence of the Page pattern is needed to protect our farming lands.

Farm implements and tile..... \$750.

We require farm wagons and implements to replace old and worthless ones. Some of these have done duty almost from the time of the opening of the institution.

Silo..... \$3,500.

In order to feed our cattle most economically and obtain the best results from our land, it would be well to use ensilage for fodder. Our pasturage is insufficient for our herd.

COMMENTS.

The Insanity Law of 1896, with which you are familiar, and part of which is appended, has several new features, some of which are said to have been devised for the further protection of the public against illegal commitments. In our opinion the operation of the State Care Act has done much to enlighten the public as to modern hospital methods for the treatment of the insane, and to remove whatever fear might formerly have existed regarding illegal commitments. However, if the new law shall impart to the public mind a sense of greater security than it has heretofore felt, any inconvenience in its operation will be of small moment.

UNIFORMITY OF SALARIES AND WAGES.

On January 1, 1896, the law of 1895, regarding salaries and wages, went into effect. This change has given general satisfaction at this hospital, as it has resulted in a general increase of wages.

OFFICIAL VISITS.

The hospital has been visited during the year by the State Commission in Lunacy as follows: Commissioner MacDonald, December 12th and 13th and April 25th; Commissioner Brown, May 12-15 and July 11-14; Commissioner Reeves, December 12th and 13th and May 14th.

Among other distinguished visitors were: On July 30th, Lieutenant-Governor Charles T. Saxton; on August 6th, Hon. L. H. Brown, Secretary of State of California; on November 15, 1895, Miss Lathrop, member of the Illinois State Board of Charities; and Superintendents Wise, Blumer, Howard and Wagner, and Dr. Carson.

MEDICAL STAFF AND OFFICERS.

It gives me great pleasure to bear testimony to the efficiency of my associates upon the medical staff. Their able aid and loyal support have contributed to whatever measure of success has crowned our united efforts. I am especially indebted to Dr. H. P. Frost, first assistant physician, for compiling the annual statistical tables.

The following changes have occurred in the staff of this hospital:

On November 14, 1895, Dr. J. Ernestine Hills was appointed in place of Dr. C. L. Bristol, resigned. Dr. George B. Wheeler was promoted from interne to junior assistant physician on December 15, 1895. During his short service Dr. Wheeler, by his many good qualities of mind and heart, had endeared himself to the entire household. His brief illness and unexpected death, on May 7, 1896, cast a gloom over all. The future held to him the promise of a life of usefulness and honor. Dr. William Steinach, who was appointed medical interne February 25, 1896, was promoted to fill the vacancy caused by Dr. Wheeler's death.

I am also indebted to the steward, Mr. M. J. Gilbert, for valuable assistance in his department.

EMPLOYES.

It is with pleasure that I render acknowledgment for services faithfully given by our large corps of employes and attendants. Few realize the patience and self-denial exercised by those who daily wait upon and care for the insane. Of course, occasionally we find individuals recreant to their trust, and then examples have to be made by summary dismissals. Many changes have taken place among our number, and it is with sorrow that we record the deaths of two faithful ones, Catherine Cranney, who died December 16, 1895, and Frank Andrus, who died February 20, 1896.

On April 1, 1896, Mr. and Mrs. Henry Kitson resigned their positions which they had so faithfully and honorably filled for over twenty years. Not often has the hospital lost such faithful and efficient employes. It is a pleasure to place upon record the high esteem in which they were held by officers, employes and patients.

ACKNOWLEDGMENTS.

For weekly religious services and visitations to the sick I desire to acknowledge our indebtedness to Rev. H. A. Porter, Rev. C. W. MacNish, Rev. Harsey King, Rev. Father O'Connell and Rev. Father Curran, all of Ovid.

The press have gratuitously and generously contributed to our patients' library the following periodicals:

	No. of copies.
Attica News, Attica, N. Y.....	1
Auburn Deutsch Zeitung, Auburn, N. Y.....	2
Allegany County Democrat, Wellsville, N. Y.....	2
Alfred Sun, Alfred, N. Y.....	1
Addison Advertiser, Addison, N. Y.....	2
Addison Record, Addison, N. Y.....	1
Batavia Daily News, Batavia, N. Y.....	1
Batavian, Batavia, N. Y.....	2
Castilian, Castile, N. Y.....	1
Connecticut Catholic, Hartford, Conn.....	1
Cayuga Chief, Weedsport, N. Y.....	1
Cohocton Times, Cohocton, N. Y.....	1
Caledonia Advertiser, Caledonia, N. Y.....	1
Catholic Review, New York city.....	1
Cayuga County Independent, Auburn, N. Y.....	1
Conglomerate, Middletown, N. Y.....	1
Cuba Patriot, Cuba, N. Y.....	1

	No. of copies.
Clyde Times, Clyde, N. Y.....	1
Deaf-Mutes Journal, New York city.....	1
Dansville Advertiser, Dansville, N. Y.....	1
Democratic Herald, Clyde, N. Y.....	1
Dryden Herald, Dryden, N. Y.....	1
Elmira Star (daily), Elmira, N. Y.....	1
Farmer Review, Farmer, N. Y.....	2
Geneva Advertiser, Geneva, N. Y.....	1
Geneva Gazette, Geneva, N. Y.....	1
Geneva Courier, Geneva, N. Y.....	1
Groton and Lansing Journal, Groton, N. Y.....	1
Holley Standard, Holley, N. Y.....	1
Hospital Leaflet, R. H. H., Rochester, N. Y.....	1
Hammondsport Herald, Hammondsport, N. Y.....	1
Hornellsville Times, Hornellsville, N. Y.....	1
Hornellsville Weekly Tribune, Hornellsville, N. Y.....	1
Hornellsville Evening Tribune (daily), Hornellsville, N. Y....	1
Ithaca Daily News, Ithaca, N. Y.....	3
Ithaca Democrat, Ithaca, N. Y.....	1
Ladies' Home Journal, Philadelphia, Pa.....	1
Livingston Republican, Geneseo, N. Y.....	1
Lake Shore News, Wolcott, N. Y.....	1
Le Roy Gazette, Le Roy, N. Y.....	1
Livonia Gazette, Livonia, N. Y.....	1
Montour Falls Free Press, Montour Falls, N. Y.....	1
Mt. Morris Enterprise, Mt. Morris, N. Y.....	1
Orleans County Herald, Albion, N. Y.....	1
Orleans American, Albion, N. Y.....	1
Oakfield Reporter, Oakfield, N. Y.....	1
Outlook (magazine), New York city.....	2

	No. of copies.
Ovid Gazette, Ovid, N. Y.....	2
Ovid Independent, Ovid, N. Y.....	2
Ontario County Times, Canandaigua, N. Y.....	1
Ontario County Journal, Canandaigua, N. Y.....	4
Perry Herald and News, Perry, N. Y.....	2
Penn Yan Express, Penn Yan, N. Y.....	1
Penn Yan Democrat, Penn Yan, N. Y.....	1
Prattsburg News, Prattsburg, N. Y.....	1
Rochester Morning Herald (daily), Rochester, N. Y.....	1
Spirit of the Times, Batavia, N. Y.....	1
Southern Steuben Republican, Woodhull, N. Y.....	1
Seneca Falls Reveille, Seneca Falls, N. Y.....	2
Seneca County Journal, Seneca Falls, N. Y.....	1
Seneca County Courier, Seneca Falls, N. Y.....	1
Steuben Courier, Bath, N. Y.....	1
Steuben Farmer's Advocate, Bath, N. Y.....	1
Seneca County News Letter, Geneva, N. Y.....	2
Seneca County News, Waterloo, N. Y.....	1
Union Springs Advertiser, Union Springs, N. Y.....	1
Union Advertiser, Wayland, N. Y.....	3
Victor Herald, Victor, N. Y.....	1
Waterloo Observer, Waterloo, N. Y.....	1
Weekly News and Democrat, Auburn, N. Y.....	1
Watkins Express, Watkins, N. Y.....	1
Watkins Democrat, Watkins, N. Y.....	1
Wyoming County Herald, Bliss, N. Y.....	1
Yates County Chronicle, Penn Yan, N. Y.....	2

Our thanks are due to the following persons for other contributions: Mr. O. C. Cooper, Judge W. C. Hazelton, Mrs. W. A. Swaby,

Hospital Book and Newspaper Society, Mrs. Grant Rowly, Mr. A. B. Hause, Mr. Fred Thomas, Mrs. Kate S. Bosworth, Messrs. Hydon and Patterson, Edward Gray and Professor A. H. Eldredge, for reading matter.

The State Experimental farm has sent us one fine Yorkshire boar; Professor Morris of Cornell University, a barrel of wooden vases, urns, etc., and D. B. Stewart & Co., of Ithaca, fifty pounds of tobacco.

It gives us great pleasure to acknowledge our deep obligation to Dr. Leonard Waldo, Miss Edith Waldo, Mr. Fullerton Waldo, and Professor Richard Fuessell for a string concert given January 22d. These generous friends came all the way from Bridgeport, Conn., to give our patients this delightful musical entertainment. To the Cornell Glee, Banjo and Mandolin Club we are also indebted for a fine concert on January 25th, which will long be remembered by our patients.

CONCLUSION.

In closing, it is an agreeable duty to express to you my personal acknowledgment for the distinguished honor which you conferred upon me last November. In this, my first year, I have had many evidences of your good will, sympathy, encouragement and earnest support in all matters. I can not be too thankful for the blessings of the year just closed.

WILLIAM MABON.

September 30, 1896.

Report of the Steward.

To the Medical Superintendent:

The following report of the farm and garden products, stock on hand, articles manufactured, and the classification and summary of expenditures for maintenance, for the year ending September 30, 1896, is respectfully submitted:

FARM PRODUCTS.

Apples, bushels	574
Beef, dressed, pounds.....	8,483
Corn, ears, bushels, estimated.....	4,000
Buckwheat, bushels	290
Cornstalks, tons, estimated.....	108
Chickens, dressed, pounds.....	984
Ducks, dressed, pounds.....	84
Eggs, dozens	3,366
Geese, pounds	120
Hides, pounds	772
Hay, tons	150
Milk, gallons	102,032
Mangel-wurzel, bushels, estimated.....	12,000
Oats, bushels, estimated	3,500
Potatoes, bushels, estimated.....	7,000
Pork, dressed, pounds	43,108
Straw, tons, estimated	90

Turkeys, dressed, pounds.....	396
Turnips, bushels.....	100
Wheat, bushels, estimated.....	1,200
Corn fodder, tons, estimated.....	50

GARDEN PRODUCTS.

Beets, bushels, estimated.....	1,900
Beans, string, bushels.....	413
Beans, Lima, bushels.....	90
Cabbage, heads	40,000
Carrots, bushels, estimated.....	300
Celery, heads	14,000
Corn, sweet, bushels.....	1,029
Corn, pop, estimated bushels.....	25
Cucumbers, bushels	1,227
Eggplant, bushels	36
Lettuce, bushels	1,372
Onions, bushels	684
Onions, bunches	5,683
Parsnips, estimated bushels.....	350
Peas, bushels	347
Peppers, bushels	34
Potatoes, estimated bushels.....	400
Rhubarb, bunches	21,290
Radishes, bunches	4,937
Rutabagas, estimated bushels.....	1,100
Sage, bunches	175
Salsify, bushels, estimated.....	30
Swiss Chard, bushels.....	989
Squash, summer, bushels.....	719

WILLARD STATE HOSPITAL.

41

Squash, Hubbard, bushels, estimated.....	190
Tomatoes, bushels	2,700
Turnips, bushels	840
Thyme, bunches	175
Savory, bunches	100

FARM STOCK.

Horses, good.....	35
Horses, old.....	5
Colts, one-year old.....	....
Colts, two-year old.....	1
Colts, three-year old.....	1
Colts, four-year old.....	1
Mules.....	2
Cows.....	150
Bulls.....	4
Heifers, one-year old.....	18
Heifers, two-year old.....	1
Heifer calves.....	18
Boars.....	3
Hogs, fat.....	92
Sows, for breeding.....	40
Shotes.....	176
Pigs.....	35
Geese.....	42
Ducks.....	30
Turkeys.....	75
Fowls.....	642

ARTICLES MADE IN MATRON'S DEPARTMENT.

Aprons	4,987
Attendants' caps	996
Bakers' aprons	98
Bedspreads	289
Bed protectors	17
Balmoral skirts	149
Blankets, hemmed	2,392
Chemises	2,024
Curtains	1,316
Collars	1,544
Canvas sheets	30
Clothing bags	56
Coffee bags	12
Chair covers	9
Drawers, pairs	1,662
Dresses	4,207
Dresses, quilted	14
Hats, trimmed	318
Mattress ticks	226
Napkins	180
Night gowns	182
Pillow cases	2,954
Pillow ticks	207
Sheets	3,643
Shirts	3,063
Skirts	1,870
Shrouds	224
Towels, hemmed	20,258
Tablecloths, hemmed	610

WILLARD STATE HOSPITAL.

43

Table spreads.....	29
Wrappers.....	830
Underwaists.....	36
Caps for men.....	85

GARMENTS MADE IN TAILORING DEPARTMENT.

Coats.....	1,456
Vests.....	1,240
Pants.....	1,863
Overcoats.....	137
Overalls.....	191
Over shirts.....	38
Wrappers.....	2
Drawers.....	17
Straight suits.....	93

ARTICLES MADE IN SHOE-SHOP.

Hair mattresses.....	180
Hair mattresses, remade.....	525
Hair pillows.....	50
Hair pillows, remade.....	280
Clothes bags.....	60
Reins, double team, pairs.....	5
Straps put in harnesses.....	50
Hitching straps.....	12
Halters.....	8
Straps for line men.....	3
Belts for line men.....	2
Straps for fire company.....	6
Double pole strap, pair.....	1

Double neck-yoke strap, pair.....	1
Harness straps.....	24
Hame straps.....	25
Breast straps, pairs.....	12
Neck halters and straps.....	6
Chair cushions, new.....	5
Lounge recovered.....	1
Shoes, pair, new.....	1
Couches, re-covered.....	7
Chair, re-covered.....	1
Awnings.....	10

And all repair of harnesses, boots, shoes and slippers.

Laws and Regulations Relating to the Insane.

CHAPTER 545, LAWS OF 1896.

WILLARD STATE HOSPITAL DISTRICT.

As provided for in section 10 of article 1 of the above mentioned act, the following named counties are assigned to this hospital, and constitute the district from which patients are received:

Allegany, Cayuga, Genesee, Ontario, Orleans, Schuyler, Seneca, Steuben, Tompkins, Wayne, Wyoming and Yates.

COMMITMENT OF PATIENTS.

CHAPTER 545, LAWS OF 1896, ARTICLE III.

Section 60. Order for commitment of an insane person.— A person alleged to be insane, and who is not in confinement on a criminal charge, may be committed to and confined in an institution for the custody and treatment of the insane upon an order made by a judge of a court of record of the city or county, or a justice of the supreme court of the judicial district, in which the alleged insane person resides or may be, adjudging such person to be insane, upon a certificate of lunacy made by two qualified medical examiners in lunacy, accompanied by a verified petition therefor, or upon such certificate and petition, and after a hearing to determine such question, as provided in this article. The commission shall prescribe and furnish blanks for such certificates and petitions, which shall be made only upon such blanks. An insane person shall be committed only to a state hospital, a duly licensed in-

stitution for the insane, or the Matteawan State Hospital, or to the care and custody of a relative or committee, as hereinafter provided. No idiot shall be committed to or confined in a state hospital. But any epileptic or feeble-minded person becoming insane may be committed as an insane person to a state hospital for custody and treatment therein.

§ 61. Medical examiners in lunacy; certificates of lunacy.—The certificate of lunacy must show that such person is insane and must be made by two reputable physicians, graduates of an incorporated medical college, who have been in the actual practice of their profession at least three years, and have filed with the commission a certified copy of the certificate of a judge of a court of record, showing such qualifications in accordance with forms prescribed by the commission.

Such physicians shall jointly make a final examination of the person alleged to be insane within ten days next before the granting of the order. The date of the certificate of lunacy shall be the date of such joint examination. Such certificate of lunacy shall be in the form prescribed by the commission, and shall contain the facts and circumstances upon which the judgment of the physicians is based and show that the condition of the person examined is such as to require care and treatment in an institution for the care, custody and treatment of the insane.

Neither of such physicians shall be a relative of the person applying for the order or of the person alleged to be insane, or a manager, superintendent, proprietor, officer, stockholder, or have any pecuniary interest, directly or indirectly, or be an attending physician in the institution to which it is proposed to commit such person.

§ 62. Proceedings to determine the question of insanity.—Any

person with whom an alleged insane person may reside or at whose house he may be, or the father or mother, husband or wife, brother or sister, or the child of any such person, and any overseer of the poor of the town, and superintendent of the poor of the county in which any such person may be, may apply for such order, by presenting a verified petition containing a statement of the facts upon which the allegation of insanity is based, and because of which the application for the order is made. Such petition shall be accompanied by the certificate of lunacy of the medical examiners, as prescribed in the preceding section. Notice of such application shall be served personally, at least one day before making such application, upon the person alleged to be insane, and if made by an overseer or superintendent of the poor, also upon the husband or wife, father or mother or next of kin of such alleged insane person, if there be any such known to be residing within the county, and if not, upon the person with whom such alleged insane person may reside, or at whose house he may be. The judge to whom the application is to be made may dispense with such personal service, or may direct substituted service to be made upon some person to be designated by him. He shall state in a certificate to be attached to the petition his reason for dispensing with personal service of such notice, and if substituted service is directed, the name of the person to be served therewith.

The judge to whom such application is made may, if no demand is made for a hearing in behalf of the alleged insane person, proceed forthwith to determine the question of insanity, and if satisfied that the alleged insane person is insane, may immediately issue an order for the commitment of such person to an institution for the custody and treatment of the insane. If, however, it appears that such insane person is harmless and his relatives or a

committee of his person are willing and able to properly care for him, at some place other than such institution, upon their written consent, the judge may order that he be placed in the care and custody of such relatives or such committee. Such judge may, in his discretion, require other proofs in addition to the petition and certificate of the medical examiners.

Upon the demand of any relative or near friend in behalf of such alleged insane person, the judge shall, or he may upon his own motion, issue an order directing the hearing of such application before him at a time not more than five days from the date of such order, which shall be served upon the parties interested in the application and upon such other persons as the judge, in his discretion, may name. Upon such day, or upon such other day to which the proceeding shall be regularly adjourned, he shall hear the testimony introduced by the parties and examine the alleged insane person, if deemed advisable, in or out of court, and render a decision in writing as to such person's insanity. If it be determined that such person is insane, the judge shall forthwith issue his order committing him to an institution for the custody and treatment of the insane, or make such other order as is provided in this section. If such judge can not hear the application he may, in his order directing the hearing, name some referee, who shall hear the testimony and report the same forthwith, with his opinion thereon, to such judge, who shall, if satisfied with such report, render his decision accordingly. If the commitment be made to a state hospital, the order shall be accompanied by a written statement of the judge as to the financial condition of the insane person and of the persons legally liable for his maintenance as far as can be ascertained. The superintendent of such state hospital shall be immediately notified of such commitment, and he shall,

at once, make provisions for the transfer of such insane person to such hospital.

The petition of the applicant, the certificate in lunacy of the medical examiners, the order directing a further hearing as provided in this section, if one be issued, and the decision of the judge or referee, and the order of commitment shall be presented at the time of the commitment to the superintendent or person in charge of the institution to which the insane person is committed, and verbatim copies shall be forwarded by such superintendent or person in charge and filed in the office of the state commission in lunacy. The relative, or committee, to whose care and custody any insane person is committed, shall forthwith file the petition, certificate and order, in the office of the clerk of the county where such order is made, and transmit a certified copy of such papers, to the commission in lunacy, and procure and retain another such certified copy.

The superintendent or person in charge of any institution for the care and treatment of the insane may refuse to receive any person upon any such order, if the papers required to be presented shall not comply with the provisions of this section, or if in his judgment, such person is not insane within the meaning of this statute, or if received, such person may be discharged by the commission. No person shall be admitted to any such institution under such order after the expiration of five days from and inclusive of the date thereof.

§ 63. Appeal from order of commitment.—If a person ordered to be committed, pursuant to this chapter, or any friend in his behalf, is dissatisfied with the final order of a judge or justice committing him, he may, within ten days after the making of such order, appeal therefrom to a justice of the supreme court other

than the justice making the order, who shall cause a jury to be summoned, as in case of proceedings for the appointment of a committee for an insane person, and shall try the question of such insanity in the same manner as in proceedings for the appointment of a committee. Before such appeal shall be heard, such person shall make a deposit or give a bond, to be approved by a justice of the supreme court, for the payment of the costs of the appeal, if the order of commitment is sustained. If the verdict of the jury be that such person is insane, the justice shall certify that fact and make an order of commitment as upon the original hearing. Such order shall be presented, at the time of the commitment of such insane person, to the superintendent or person in charge of the institution to which the insane person is committed, and a copy thereof shall be forwarded to the commission by such superintendent or person in charge, and filed in the office thereof. Proceedings under the order shall not be stayed pending an appeal therefrom, except upon an order of a justice of the supreme court, and made upon a notice, and after a hearing, with provisions made therein for such temporary care or confinement of the alleged insane person as may be deemed necessary.

If a judge shall refuse to grant an application for an order of commitment of an insane person proved to be dangerous to himself or others, if at large, he shall state his reasons for such refusal in writing, and any person aggrieved thereby may appeal therefrom in the same manner and under like conditions as from an order of commitment.

§ 64. Costs of commitment.—The costs necessarily incurred in determining the question of the insanity of a poor or indigent person and in securing his admission into a state hospital, and the expense of providing proper clothing for such person, in accord-

ance with the rules and regulations adopted by the commission, shall be a charge upon the town, city or county securing the commitment. Such costs shall include the fees allowed by the judge or justice ordering the commitment to the medical examiners. If the person sought to be committed is not a poor or indigent person, the costs of the proceedings to determine his insanity and to secure his commitment, as provided in this article, shall be a charge upon his estate, or shall be paid by the persons legally liable for his maintenance. If in such proceedings, the alleged insane person is determined not to be insane, the judge or justice may, in his discretion, charge the costs of the proceedings to the person making the application for an order of commitment, and judgment may be entered for the amount thereof and enforced by execution against such person.

§ 65. Liability for care and support of poor and indigent insane.—All poor and indigent insane persons not in confinement under criminal proceedings, shall, without unnecessary delay, be transferred to a State hospital and there wholly supported by the State. The costs necessarily incurred in the transfer of patients to State hospitals shall be a charge upon the State. The commission shall secure from relatives or friends who are liable or may be willing to assume the costs of support of inmates of State hospitals supported by the State, reimbursement, in whole or in part, of the money thus expended.

§ 66. Liability for the care and support of the insane other than the poor and indigent.—The father, mother, husband, wife and children of an insane person, if of sufficient ability, and the committee or guardian of his person and estate, if his estate is sufficient for the purpose, shall cause him to be properly and suitably cared for and maintained.

The commission and the superintendent of the poor of the county, and the overseer of the poor of the town where any such insane person may be, or in the city of New York, the commissioners of public charities, and in Brooklyn, the commissioners of charities and correction, may inquire into the manner in which any such person is cared for and maintained; and if, in the judgment of any of them, he is not properly or suitably cared for, may apply to a judge of a court of record for an order to commit him to a State hospital under the provisions of this article, but such order shall not be made unless the judge finds and certifies in the order that such insane person is not properly or suitably cared for by such relative or committee, or that it is dangerous to the public to allow him to be cared for and maintained by such relative or committee.

The costs and charges of the commitment and transfer of such insane person to a State hospital shall be paid by the committee, or the father, mother, husband, wife or children of such person, to be recovered in an action brought in the name of the people by the commission, the superintendent of the poor of the county, or the overseer of the poor of the town where such insane person may be, or in the city of New York in the name of the commissioners of public charities, and in the city of Brooklyn in the name of the commissioners of charities and correction.

§ 67. Duties of local officers in regard to their insane.— All county superintendents of the poor, overseers of the poor and other city, town or county authorities, having duties to perform relating to the insane poor, are charged with the duty of seeing that all poor and indigent insane persons within their respective municipalities, are timely granted the necessary relief conferred by this chapter, and, when so ordered by a judge, as herein provided, or by the commission, shall see that they are, without unnecessary delay, trans-

ferred to the proper institutions provided for their care and treatment as the wards of the State. Before sending a person to any such institution, they shall see that he is in a state of bodily cleanliness and comfortably clothed with new clothing, in accordance with the regulations prescribed by the commission. The commission may, by order, direct that any person it deems unsuitable therefor shall not be so employed or act as such attendant.

Each patient shall be sent to the State hospital, within the district embracing the county from which he is committed, except that the commission may, in their discretion, direct otherwise, but private or public insane patients, for whom homeopathic care and treatment may be desired by their relatives, friends or guardians, may be committed to the Middletown State Homeopathic hospital, or to the Collins State Homeopathic hospital, from any of the counties of the State, in the discretion of the judge granting the order of commitment; and the hospital to which any patient is ordered to be sent shall, by and under the regulations made by such commission, send a trained attendant to bring the patient to the hospital. Each female committed to any institution for the insane shall be accompanied by a female attendant, unless accompanied by her father, brother, husband or son. After the patient has been delivered to the proper officers of the hospital, the care and custody of the municipality from which he is sent shall cease.

§ 68. Duty of committee and others to care for the insane; apprehension and confinement of a dangerous insane person.— When an insane person is possessed of sufficient property to maintain himself, or his father, mother, husband, wife or children are of sufficient ability to maintain him, and his insanity is such as to endanger his own person, or the person and property of others, the committee of his person and estate, or such father, mother, husband,

wife or children must provide a suitable place for his confinement, and there maintain him in such manner as shall be approved by the proper legal authority. The county superintendent of the poor and the overseers of the poor of towns and cities, the commissioners of public charities in the city of New York, and the commissioners of charities and correction in the city of Brooklyn, are required to see that the provisions of this section are carried into effect in the most humane and speedy manner.

Upon the refusal or neglect of a committee, guardian or relative of an insane person to cause him to be confined, as required in this chapter, the officers named in this section shall apply to a judge of a court of record of the city or county, or to a justice of the supreme court of the judicial district in which such insane person may reside or be found, who, upon being satisfied, upon proper proofs, that such person is dangerously insane and improperly at large, shall issue a precept to one or more of the officers named, commanding them to apprehend and confine such insane person in some comfortable and safe place; and such officers in apprehending such insane person shall possess all the powers of a peace officer executing a warrant of arrest in a criminal proceeding. Unless an order of commitment has been previously granted, such officers shall forthwith make application for the proper order for his commitment to the proper institution for the care, custody and treatment of the insane, as authorized by this chapter, and if such order is granted, such officer shall take the necessary legal steps to have him transferred to such institution. In no case shall any such insane person be confined in any other place than a State hospital or duly licensed institution for the insane, for a period longer than 10 days, nor shall such person be committed as a disorderly person to any prison, jail or lockup for criminals, unless

he be violent and dangerous, and there is no other suitable place for his confinement, nor shall he be confined in the same room with a person charged with or convicted of crime.

Any person apparently insane, and conducting himself in a manner which in a sane person would be disorderly, may be arrested by any peace officer and confined in some safe and comfortable place until the question of his sanity be determined, as prescribed by this chapter. The officer making such arrest shall immediately notify the superintendent of the poor of the county, or the overseers of the poor of the town or city, or, in the city of New York, the commissioners of public charities, or, in the city of Brooklyn, the commissioners of charities and correction, who shall forthwith take proper measures for the determination of the question of the insanity of such person.

§ 69. Patients admitted under special agreement.—The managers of a State hospital may authorize the superintendent to admit thereto, under special agreement, insane patients, who are residents of the State, other than poor and indigent insane persons, when there is room for such insane therein. But no patient shall be permitted to occupy more than one room in any State hospital, nor shall any patient, his friends or relatives, be permitted to pay for his care and treatment therein a sum greater than \$10 a week. Such patients, when so received, shall be subject to the general rules and regulations of the hospital. The amount agreed upon for the maintenance of such insane persons in a State hospital, shall be secured by a properly executed bond, and bills therefor shall be collected monthly. The commission may appoint agents, whose duty it shall be to secure from relatives and friends who are liable therefor, or who may be willing to assume the cost

of support of any of the inmates of State hospitals as are being supported by the State, reimbursement in whole or in part of the money so expended.

TRANSFER OF INSANE PATIENTS TO STATE HOSPITALS.

The following rules must be observed by superintendents of State hospitals, by all county, city and town officials, also by relatives and friends when unaccompanied by a public officer, in the removal of insane persons to State hospitals and in the transfer of the same from one State hospital to another :

1. Patients must be in a condition of bodily cleanliness.
2. Patients must not under any circumstances be taken from their residence to a poorhouse for the purpose of examination as to their sanity.
3. Patients must be provided with the following:
 - (a) One full suit of underclothing;
 - (b) One full suit of outer clothing, including head wear, boots or shoes.

Between the last day of October and the last day of March, there shall be provided, in addition to the foregoing, a suitable overcoat for men patients and a suitable shawl or cloak for women patients; also gloves or mittens. Considering the great danger, always present, of the introduction of contagious or infectious diseases into institutions where large numbers of people are congregated, and to avoid, as far as possible, the introduction of such diseases by means of wearing apparel, the clothing referred to above must in all cases be new. But new clothing need not be provided where patients are transferred from one institution for the care and treatment of the insane to another.

4. In traveling by rail, patients must not be compelled to ride in smoking or baggage cars, except in the case of men patients who may be so violent, profane or obscene as to render their presence in ordinary passenger coaches offensive. If any portion of the route be traversed by team, a covered conveyance should, unless impossible, be provided. The shortest practicable route should be selected; the hour of departure should be timed, as far as possible, so as to avoid the necessity of stopping over night on the journey and so as not to reach the hospital at an unseasonable hour. Whenever practicable, a notice in advance of the coming of the patients should be sent by mail or telegraph to the medical superintendent of the hospital. In cases of violent patients, a sufficient number of attendants should be provided to control their actions without resorting to the use of mechanical restraints, such as straps, ropes, chains, hand-cuffs, etc. Quieting medicines should not be given to such patients except upon the prescription of a physician. If it becomes necessary to remain over night or for a number of hours at a station on the route, patients must not be taken to jail, police station or lock-up. Food in proper quantity and quality, and at intervals not exceeding five hours, should be provided for patients, but no alcoholic beverages must be given unless upon prescription of a physician. Opportunity must be afforded for attention to the calls of nature, and the rules of decency must be observed. In cases of the employment of extra attendants in conveying violent patients, care must be taken that they are of adult age and of good moral character. The provisions of the statute which requires that a woman shall accompany women patients when taken to State hospital must be strictly complied with.

5. Any violation of the requirements of this order shall be promptly reported by the medical superintendent of the hospital receiving the patient to the State Commission in Lunacy.

6. This order shall take effect January first, eighteen hundred and ninety-three.

By the Commission, December 1, 1892.

[L. s.]

T. E. McGARR,

Secretary.

**ORDER OF COMMISSION IN LUNACY IN THE MATTER OF
TRANSFER OF PATIENTS, DATED SEPTEMBER 30, 1893.**

ORDERED:

1. The authorities of each State hospital are hereby directed to send such number of trained attendants as may be necessary to transfer patients supported at public expense from their homes or from poorhouses, as the case may be, to said State hospitals.

2. All transfers of insane patients, as provided by this order, must be made in conformity with the rules prescribed in the order of the Commission dated December 1, 1892, and known as form 113.

3. Patients supported at public expense shall be transported only by such public officers as are herein named, but relatives or friends may transfer or accompany such patients at their own expense.

4. This order shall be in effect on and after October 1, 1893.

By the President of the Commission, September 1, 1893.

T. E. McGARR,

Secretary.

SERVICE OF LEGAL PAPERS UPON INSANE PATIENTS.

By direction of the State Commission in Lunacy, the superintendent or officer in charge of an institution for the care and treatment of the insane can not permit the service of any legal process whatever upon any insane patient, except upon the order of a judge of a court of record, which shows that the judge had notice of the fact that the person sought to be served was at the date of the order an inmate of such institution.

It is also directed that no insane person be permitted to sign any bill, check, draft or other evidence of indebtedness, or to execute any contract, deed, mortgage or other legal conveyance, except upon the order of a judge of a court of record, which shows that the judge had notice of the fact that the person whose signature is sought to be obtained was at the date of the order an inmate of an institution for the care and treatment of the insane.

DISCHARGE OF PATIENTS.

(From Chapter 545, Laws of 1896.)

§ 74. Discharge of patients.— The superintendent of a state hospital, on filing his written certificate with the secretary of the board of managers, may discharge any patient, except one held upon an order of a court or judge having criminal jurisdiction in an action or proceeding arising out of a criminal offense at any time, as follows:

1. A patient who, in his judgment, is recovered.
2. Any patient who is not recovered but whose discharge, in the judgment of the superintendent, will not be detrimental to the public welfare or injurious to the patient; provided, however,

that before making such certificate, the superintendent shall satisfy himself, by sufficient proof, that friends or relatives of the patient are willing and financially able to receive and properly care for such patient after his discharge.

When the superintendent is unwilling to certify to the discharge of an unrecovered patient upon request, and so certifies in writing, giving his reasons therefor, any judge of a court of record in the judicial district in which the hospital is situated may, upon such certificate and an opportunity of a hearing thereon being accorded the superintendent, and upon such other proofs as may be produced before him, direct, by order, the discharge of such patient, upon such security to the people of the state as he may require, for the good behavior and maintenance of the patient. The certificate and the proof and the order granted thereon shall be filed in the clerk's office of the county in which the hospital is situated, and a certified copy of the order in the hospital from which the patient is discharged. The superintendent may grant a parole to a patient not exceeding thirty days, under general conditions prescribed by the commission.

The commission may, by order, discharge any patient in its judgment improperly detained in any institution. A poor and indigent patient discharged by the superintendent, because he is an idiot, or an epileptic, not insane, or because he is not a proper case for treatment within the meaning of this chapter, shall be received and cared for, by the superintendent of the poor or other authority having similar powers, in the county from which he was committed. A patient, held upon an order of a court or judge having criminal jurisdiction, in an action or proceeding arising from a criminal offense, may be discharged upon the superintendent's certificate of recovery, approved by any such court or judge.

VISITS TO PATIENTS AND TO THE HOSPITAL.

I. For the purpose of enabling the public to obtain a correct knowledge of the arrangement and management of a hospital for the insane, and of doing so without interference with the regular duties of the officers, and the transaction of necessary business, visitors, in limited numbers, will be admitted to such portions of the house as may be occupied by quiet patients, between the hours of two and five in the afternoon of every day of the week, excepting Sunday, Saturday and holidays.

II. Exceptions to this rule may be made in favor of public officers, persons connected with public institutions, and relatives of patients.

III. Visitors will not be permitted to enter the wards, pass to the rear of the building, or approach the windows from the outside for conversation, unless accompanied by a resident officer.

IV. The person appointed to conduct visitors through the wards will not be permitted to converse about patients by name, or to point them out, and visitors are requested to observe an appropriate discretion in this respect.

V. Persons wishing to see patients, or learn their condition, should make inquiry of the superintendent, or one of the assistant physicians, at the medical office. As a rule, information concerning patients will be furnished only to relatives and public officers.

CORRESPONDENCE, ETC.

Letters are not written to friends of patients at stated intervals, but only in reply to letters of inquiry, and in case of sickness or death. It is desirable to have but one correspondent for each patient.

The correspondent will be informed by telegraph in case of the serious sickness, or in the event of the death of a patient, where it is practicable to do so. Remains will be sent by express when a guarantee is received from the express agent that the charges for transportation will be paid, otherwise they will be appropriately buried in the hospital cemetery, and the grave permanently marked, numbered and recorded.

All correspondence concerning patients or the business of the hospital, should be addressed to Superintendent Willard State Hospital, Willard, Seneca county, N. Y.

STATISTICAL TABLES.

Statistical Tables.

TABLE No. 1.

Showing Movement of Population for the Year Ending September 30, 1896.

	Men.	Women.	Total.
Remaining October 1, 1895	1,028	1,173	2,201
Admitted during year ending September 30, 1896.....	231	299	530
Total number under treatment during year	1,259	1,472	2,731
Daily average population.....	1,054	1,146	2,200
Capacity of institution.....	1,104	1,166	2,270
Discharged during the year :			
As recovered.....	34	45	79
As not recovered.....	57	203	260
As not insane			
Died	74	70	144
Whole number discharged during the year.	165	318	483
Remaining October 1, 1896.....	1,094	1,154	2,248

TABLE No. 2.

October 1, 1895, to September 30, 1896.

Date of opening.....	1869.
Total acreage of grounds and buildings.....	1,107
Value of real estate, including buildings.....	\$1,466,205 34
Value of personal property.....	222,449 91
Acreage under cultivation.....	750
Capacity of institution October 1, 1896.....	2,270
Daily average number of patients.....	2,200

Receipts during year:

Balance on hand October 1, 1895.....	\$4,839 37
From State treasury for maintenance on estimates 1 to 12, inclusive.....	317,561 43
From private patients.....	1,939 11
From reimbursing patients.....	14,332 49
From all other sources.....	5,277 33

Total receipts for maintenance.....	\$343,949 73
-------------------------------------	--------------

From State Comptroller for extraordinary improvements under Legislative appropriations of 1893 and 1894, including balance on hand October 1, 1895.....	\$2,429 97
Received from State Commission in Lunacy for extraordinary improvements under chapter 693, Laws of 1895, including balance October 1, 1895.....	122,757 25
Received from State Comptroller under Legislative appropriation, chapter 932, Laws 1895, employing clergy.....	1,000 00

Disbursements during year:

Estimate No. 1. For officers' salaries.....	\$18,890 73
Estimate No. 2. For wages.....	126,648 15
Estimate No. 3. For provisions and stores.....	111,486 33
Estimate No. 4. For ordinary repairs.....	5,113 14
Estimate No. 5. For farm and grounds.....	6,785 20
Estimate No. 6. For clothing.....	24,461 07
Estimate No. 7. For furniture and bedding.....	8,291 42
Estimate No. 8. For books and stationery.....	2,284 74
Estimate No. 9. For fuel and light.....	23,218 71
Estimate No. 10. For medical supplies.....	2,172 67
Estimate No. 11. For miscellaneous expenses.....	7,412 56
Estimate No. 12. For transportation.....	3,256 42

Total disbursements during year for maintenance, estimates 1 to 12, inclusive.....	\$340,021 14
--	--------------

Total disbursements during year for extraordinary improvements under Legislative appropriations of 1893 and 1894.....	\$2,439 97
Total disbursements during year for extraordinary improvements under apportionments by State Commission in Lunacy for extraordinary improvements.....	122,757 25
Total disbursements for employing clergymen under Legislative appropriation, chapter 932, Laws 1895.....	1,000 00
<hr/>	
Balances October 1, 1896:	
General maintenance fund.....	\$3,928 59
<hr/>	
Weekly per capita cost on daily average number of patients, estimates 1 to 12 inclusive, and exclusive of payments from surplus and other funds.....	\$2,972
<hr/>	
Maximum rate of wages paid attendants:	
Men.....	\$34 00
Women.....	29 00
Minimum rate of wages paid attendants:	
Men.....	20 00
Women.....	14 00
<hr/>	
Proportion of day attendants to average daily population.....	1 to 13.09
Proportion of night attendants to daily average population.....	1 to 75
Percentage of daily patient population engaged in some kind of useful occupation.....	48.5
<hr/>	
Estimated value of farm and garden products during year.....	\$35,295 31
Estimated value of articles made or manufactured by patients during the year.....	26,853 87
<hr/>	

TABLE No. 3.

Showing Assigned Causes of Insanity in Cases Admitted During the Year Ending September 30, 1896, and Since October 1, 1888.

	YEAR ENDING SEPTEMBER 30, 1896.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Moral:						
Adverse circumstances (including business anxieties and pecuniary difficulties)	10	14	24	49	39	88
Domestic troubles (including loss of relatives and friends)	6	26	32	44	124	168
Mental anxiety and worry (not included above) and overwork	4	14	18	76	81	157
Religious excitement	3	5	8	20	18	38
Physical:						
Abortion .....	....	1	1	.....	1	1
Accident or injury to head	8	3	11	43	13	56
Accident or injury to spine	1	....	1	7	4	11
Arrested development	2	1	3	16	9	25
Cerebral disease	6	3	9	32	15	47
Climacteric .....	....	10	10	.....	58	58
Epilepsy	8	11	19	78	59	137
Fever (typhoid)	1	....	1	5	3	8
Fright	1	3	4	1	3	4
Hereditary influences ascertained (direct and collateral) ...	23	28	51	144	252	396
Influenza	9	4	13	21	10	31
Intemperance in drink and narcotics	34	8	42	221	40	261
Lactation .....	....	....	....	.....	12	12
Lightning stroke ...	....	....	....	.....	1	1
Old age	5	5	10	50	54	104

TABLE No. 3—(Continued).

	YEAR ENDING SEPTEMBER 30, 1896.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Other bodily diseases or disorders.....	14	13	27	91	123	214
Parturition and puer- peral state.....	....	5	5	....	34	34
Phthisis pulmonalis.	....	....	....	8	....	8
Puberty .....	....	1	1	....	1	1
Self-abuse (sexual)..	16	1	17	85	4	89
Shock at menstrual period .....	....	1	1	....	1	1
Sunstroke	3	1	4	45	4	49
Surgical operation..	1	2	3	1	2	3
Unascertained	69	131	200	490	614	1,104
Uterine and ovarian disorders .....	....	8	8	....	30	30
Venereal disease....	7	....	7	32	7	39
Total	231	299	530	1,559	1,616	3,175

TABLE No. 4.

Showing Forms of Insanity in Those Admitted, Recovered and Died During the Year Ending September 30, 1896, and Since October 1, 1888.

FORM.	YEAR ENDING SEPTEMBER 30, 1896.			SINCE OCTOBER 1, 1888.		
	Admitted.	Recovered.	Died.	Admitted.	Recovered.	Died.
Mania, acute.....	46	22	6	243	94	35
Mania, sub-acute..	10	10	....	120	46	3
Mania, recurrent..	8	2	....	54	20	10
Mania, chronic...	75	1	23	379	22	191
Melancholia, acute	75	39	11	388	124	99
Melancholia, sub-acute	5	1	....	104	26	10
Melancholia, chronic	35	4	7	317	19	70
Alternating (circular) insanity..	.....	.....	....	2	.....	.....
General paralysis.	6	.....	9	87	.....	75
Dementia, primary	1	.....	....	2	.....	.....
Dementia, terminal	239	.....	76	1,209	.....	625
Epilepsy	18	.....	11	148	.....	120
Imbecility	11	.....	1	79	.....	13
Idiocy	1	.....	....	36	.....	15
Not insane * .....	.....	.....	....	7	.....	.....
	530	79	144	3,175	351	1,266

*Includes cases of alcoholism, opium habit, etc.

TABLE No. 5.

Showing the Number and Percentage of Recoveries and Deaths, Based Upon the Average Daily Population, Since October 1, 1888.

YEARS.	Average daily population.	Recoveries.	Percentage.	Deaths.	Percentage.
1889.....	2,004	20	.9	113	5.6
1890.....	2,052	13	.6	123	5.9
1891.....	2,055	36	1.7	168	8.2
1892.....	2,062	31	1.5	191	9.2
1893.....	2,140	41	1.9	165	7.7
1894.....	2,165	70	3.2	219	10.1
1895.....	2,188	61	2.7	143	6.5
1896.....	2,200	79	3.6	144	6.5

TABLE No. 6.

Showing the Causes of Death of Patients Who Died During the Current Year, and Since October 1, 1888.

CAUSE OF DEATH.	YEAR ENDING SEPTEMBER 30, 1896.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Abscess of brain.....	1	1	....	1	1
Acute hepatitis.....	1	1
Acute nephritis.....	4	2	6
Acute pharyngitis.....	1	1	....	1	1
Acute tuberculosis.....	2	2
Asphyxia.....	2	....	2
Asphyxia from lodgment of food in pharynx.....	2	....	2
Asthenia following fracture of femur.....	3	3
Bronchitis.....	5	1	6
Bulbar paralysis.....	1	1	....	1	1
Cancer.....	5	14	19
Cancer of liver.....	1	1	....	1	1
Cancer of stomach.....	1	1	....	1	1
Cancer of testicle.....	1	....	1	1	....	1
Cancer of uterus.....	1	1	....	1	1
Cellulitis.....	2	....	2
Cerebral apoplexy.....	4	7	11	29	62	91
Chronic nephritis.....	5	5	10	27	16	43
Cirrhosis of liver.....	1	....	1
Concussion of brain.....	1	....	1
Cystic degeneration of kidneys.....	1	....	1

TABLE No. 6—(Concluded).

CAUSE OF DEATH.	YEAR ENDING, SEPTEMBER 30, 1896.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Debility of old age .....	.....	3	3	26	40	66
Diabetes mellitus .....	.....	1	1	1	1	2
Diarrhœa .....	.....	3	3	7	20	27
Dilatation of the heart .....	.....	.....	.....	1	2	3
Disseminated cerebro-spinal sclerosis .....	.....	.....	.....	1	.....	1
Dysentery	2	.....	2	8	7	15
Epilepsy	1	2	3	38	32	70
Empyema .....	.....	.....	.....	1	.....	1
Endocarditis	2	.....	2	4	.....	4
Enteritis	3	.....	3	17	18	35
Epthelioma of bladder	2	.....	2	2	.....	2
Erysipelas	1	2	3	4	7	11
Exhaustion from acute mania .....	.....	.....	.....	6	8	14
Exhaustion from acute melancholia	2	1	3	21	6	27
Exhaustion from chronic mental disease	1	3	4	35	53	88
Exhaustion from hemiplegia .....	.....	.....	.....	1	.....	1
Fatty degeneration of the heart .....	.....	2	2	.....	2	2
Fatty degeneration of the liver .....	.....	.....	.....	.....	1	1
Fracture of ribs and lumbar vertebræ .....	.....	.....	.....	1	.....	1
Gangrene of leg .....	.....	.....	.....	1	.....	1
Gastritis .....	.....	.....	.....	1	1	2
General paresis	5	2	7	63	15	78

Hemorrhage from stomach.....	....	1	1	....	1	1
Hip joint disease.....	....	....	....	1	....	1
Influenza.....	....	....	....	1	4	5
Intestinal obstruction.....	2	2	4	6	3	9
Intestinal ulceration.....	....	....	....	1	....	1
Locomotor ataxia.....	....	....	....	4	....	4
Meningitis.....	....	....	....	4	2	6
Oedema of the lungs.....	....	....	....	....	1	1
Pericarditis.....	....	....	....	1	....	1
Peritonitis.....	1	1	2	6	2	8
Phthisis pulmonalis.....	14	9	23	108	171	279
Pharyngeal abscess.....	....	....	....	2	....	2
Pneumonia.....	13	11	24	88	69	157
Pleurisy.....	....	....	....	1	1	2
Psoas abscess.....	....	....	....	....	1	1
Pulmonary abscess.....	....	....	....	1	2	3
Pulmonary gangrene.....	....	....	....	1	....	1
Pulmonary hemorrhage.....	....	....	....	....	1	1
Pyelitis.....	....	....	....	1	....	1
Pyonephrosis.....	....	....	....	1	1	2
Rupture of aorta.....	....	....	....	....	1	1
Rupture of internal carotid artery due to carcinoma of neck.....	....	....	....	....	1	1
Rupture of the heart.....	....	....	....	....	1	1
Senile gangrene.....	....	....	....	1	....	1
Septicemia.....	....	....	....	2	2	4
Strangulated hernia.....	....	....	....	....	1	1
Suicide.....	....	....	....	2	1	3

TABLE No. 6—(Concluded).

CAUSE OF DEATH.	YEAR ENDING SEPTEMBER 30, 1896.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Suppurative endo-carditis.....	....	....	....	....	1	1
Suppurative hepatitis.....	....	....	....	1	....	1
Tubercular peritonitis.....	....	2	2	....	2	2
Tuberculosis of kidneys.....	1	....	1	1	....	1
Typhoid fever.....	....	....	....	2	4	6
Valvular disease of the heart.....	14	7	21	61	57	118
Total	74	70	144	616	650	1,266

TABLE No. 7.

Showing the First and Subsequent Admissions of Patients Admitted During the Current Year and Since October 1, 1888.

NUMBER OF ADMISSIONS.	YEAR ENDING SEPTEMBER 30, 1896.						SINCE OCTOBER 1, 1888.					
	CASES ADMITTED.			TIMES PREVIOUSLY DISCHARGED RECOVERED.			CASES ADMITTED.			TIMES PREVIOUSLY DISCHARGED RECOVERED.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
First	193	253	446	2	3	5	1,419	1,463	2,882	15	12	27
Second	35	45	80	....	....	....	116	135	251	2	6	8
Third	2	1	3	....	....	....	21	11	32	1	....	1
Fourth or more	1	....	1	....	....	....	3	7	10	....	....	....
Total cases	231	299	530	2	3	5	1,559	1,616	3,175	18	18	36
Total persons	230	299	529	....	....	....	1,541	1,598	3,139	....	....	....

TABLE No. 8.

Showing Hereditary Tendency to Insanity in Patients Admitted During the Current Year and Since October 1, 1888.

	YEAR ENDING SEPTEMBER 30, 1896.			SINCE OCTOBER 1, 1888		
	Men.	Women.	Total.	Men.	Women.	Total.
Paternal branch.....	14	19	33	95	128	223
Maternal branch.....	30	35	65	139	163	302
Paternal and maternal branches.....	2	7	9	16	30	46
Collateral branches...	23	23	46	157	173	330
No hereditary tend- ency	71	74	145	518	442	960
Unascertained.....	91	141	232	634	680	1,314
Total.....	231	299	530	1,559	1,616	3,175

TABLE No. 9.

Showing Civil Condition of Patients Admitted During the Current Year and Since October 1, 1888.

CIVIL CONDITION.	YEAR ENDING SEPTEMBER 30, 1896.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Single.....	122	129	251	788	606	1,394
Married	86	123	209	592	688	1,280
Widowed	19	43	62	135	285	420
Divorced	2	2	4	12	9	21
Unascertained	2	2	4	32	28	60
Total.....	231	299	530	1,559	1,616	3,175

TABLE No. 10.

Showing Degree of Education of Patients Admitted During the Current Year and Since October 1, 1888.

DEGREE OF EDUCATION.	YEAR ENDING SEPTEMBER 30, 1896.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Collegiate	2	1	3	20	9	29
Academic	15	14	29	96	90	186
Common school	144	137	281	931	915	1,846
Read and write	3	3	6	70	17	87
Read only	12	20	32	68	99	167
No education	21	19	40	121	109	230
Unascertained	34	105	139	253	377	630
Total	231	299	530	1,559	1,616	3,175

TABLE No. 11.

Showing the Duration of Insanity Previous to Admission, and the Period Under Treatment of Patients Discharged Recovered During the Current Year and Since October 1, 1888.

	YEAR ENDING SEPTEMBER 30, 1896.						SINCE OCTOBER 1, 1888.					
	DURATION PREVIOUS TO ADMISSION.			PERIOD UNDER TREATMENT.			DURATION PREVIOUS TO ADMISSION.			PERIOD UNDER TREATMENT.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
Under one month.....	12	19	31	1	....	1	59	51	110	2	....	2
One to three months..	5	15	20	1	2	3	32	51	83	28	8	36
Three to six months...	6	5	11	12	13	25	24	28	52	53	42	95
Six to nine months....	3	1	4	9	14	23	11	9	20	29	36	65
Nine months to one year.	1	2	3	3	5	8	6	9	15	22	28	50
One year to eighteen months.....	3	1	4	4	4	8	8	4	12	25	29	54
Eighteen months to two years.....	1	....	1	1	....	1	8	5	13	2	10	12
Two to three years....	3	2	5	2	2	4	6	8	14	6	17	23
Three to four years....	....	....	....	....	4	4	2	2	4	2	5	7
Four to five years....	....	....	....	1	....	1	....	....	....	3	1	4
Five to ten years.....	....	....	....	....	....	....	4	5	9	1	1	2
Ten to twenty years...	....	....	....	....	1	1	1	2	3	....	1	1
Not Insane *	....	....	....	....	....	....	....	....	....	....	....	....
Unascertained.....	....	....	....	....	....	....	12	4	16	....	....	....
Total.....	34	45	79	34	45	79	173	178	351	173	178	351

* Includes cases of alcoholism, opium habit, etc,

TABLE No. 12.

Showing the Duration of Insanity Previous to Admission, and the Period Under Treatment of Patients Discharged Not Recovered During the Current Year and Since October 1, 1888.

	YEAR ENDING SEPTEMBER 30, 1896.						SINCE OCTOBER 1, 1888.					
	DURATION PREVIOUS TO ADMISSION.			PERIOD UNDER TREATMENT.			DURATION PREVIOUS TO ADMISSION.			PERIOD UNDER TREATMENT.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
Under one month.....	4	7	11	3	....	3	28	19	47	12	3	15
One to three months. .	3	8	11	2	3	5	35	22	57	38	24	62
Three to six months...	3	2	5	4	4	8	24	25	49	52	33	85
Six to nine months....	1	1	2	3	2	5	9	9	18	37	33	70
Nine months to one year ....	....	1	1	5	7	12	9	6	15	27	26	53
One year to eighteen months.....	6	5	11	3	5	8	35	25	60	33	25	58
Eighteen months to two years.....	....	2	2	3	4	7	7	12	19	32	30	62
Two to three years....	5	10	15	24	105	129	59	41	100	51	146	197
Three to four years....	3	7	10	7	28	35	45	56	101	28	52	80
Four to five years.....	1	4	5	....	1	1	27	39	66	25	33	58
Five to ten years.....	10	21	31	1	24	25	83	95	178	97	92	189
Ten to twenty years....	5	23	28	1	16	17	55	71	126	153	126	279
Twenty to thirty years. ....	....	7	7	1	4	5	28	35	63	29	28	57
Over thirty years.....	....	....	....	....	....	....	22	16	38	....	....	....
Unascertained.....	16	105	121	....	....	....	148	180	328	....	....	....
Total	57	203	260	57	203	260	614	651	1,265	614	651	1,265

TABLE No. 13.

Showing the Duration of Insanity Previous to Admission, and the Period Under Treatment of Patients who Died During the Current Year and Since October 1, 1888.

	YEAR ENDING SEPTEMBER 30, 1896.						SINCE OCTOBER 1, 1888.					
	DURATION PREVIOUS TO AD- MISSION.			PERIOD UNDER TREATMENT.			DURATION PREVIOUS TO AD- MISSION.			PERIOD UNDER TREATMENT.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
Under one month.....	5	5	10	3	4	7	32	19	51	43	27	70
One to three months...	3	3	6	9	7	16	29	27	56	67	60	127
Three to six months...	4	....	4	4	2	6	31	25	56	56	50	106
Six to nine months	8	2	10	3	6	9	33	19	52	26	44	70
Nine months to one year	2	2	4	4	....	4	20	17	37	35	29	64
One year to eighteen months.....	5	2	7	1	1	2	33	28	61	48	40	88
Eighteen months to two years.....	1	2	3	5	5	10	16	18	34	40	39	79
Two to three years....	5	5	10	10	6	16	67	55	122	50	38	88
Three to four years....	5	6	11	11	5	16	41	46	87	49	41	90
Four to six years.....	4	9	13	8	6	14	48	61	109	36	43	79
Six to ten years.....	7	7	14	4	4	8	54	73	127	59	60	119
Ten to twenty years ...	9	8	17	9	15	24	60	75	135	84	127	211
Twenty years and over.	3	6	9	3	9	12	26	41	67	23	52	75
Unascertained	13	13	26	....	....	....	126	146	272	....	....	....
Total.....	74	70	144	74	70	144	616	650	1,266	616	650	1,266

TABLE No. 14.

Showing Ages of Those Admitted During the Current Year and Since October 1, 1888.

AGE.	YEAR ENDING SEPTEMBER 30, 1896.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
From 5 to 10 years.	....	....	....	.....	.....	.....
From 10 to 15 years.	....	....	....	5	2	7
From 15 to 20 years.	8	7	15	48	28	76
From 20 to 25 years.	9	10	19	123	81	204
From 25 to 30 years.	14	15	29	137	124	261
From 30 to 35 years.	22	26	48	151	152	303
From 35 to 40 years.	33	42	75	180	168	348
From 40 to 50 years.	48	60	108	312	391	703
From 50 to 60 years.	38	60	98	270	311	581
From 60 to 70 years.	29	50	79	179	201	380
From 70 to 80 years.	26	25	51	123	129	252
From 80 to 90 years.	4	4	8	30	29	59
From 90 to 95 years.	....	....	....	1	.....	1
Total	231	299	530	1,559	1,616	3,175

TABLE No. 15.

Showing Ages of Those Discharged Recovered During the Current Year and Since October 1, 1888.

AGE.	YEAR ENDING SEPTEMBER 30, 1896			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
From 10 to 20 years..	1	1	2	5	6	11
From 20 to 30 years..	13	14	27	56	47	103
From 30 to 40 years..	10	15	25	40	59	99
From 40 to 50 years..	5	7	12	34	36	70
From 50 to 60 years..	3	4	7	27	22	49
From 60 to 70 years..	1	2	3	9	5	14
From 70 to 80 years..	1	2	3	1	3	4
From 80 to 90 years..	....	....	....	1	....	1
Total.....	34	45	79	173	178	351

TABLE No. 16.

Showing Ages of Patients Who Died During the Current Year and
Since October 1, 1888.

AGE.	YEAR ENDING SEPTEMBER 30, 1896.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
From 10 to 15 years ..	....	....	....	....	....	....
From 15 to 20 years ..	....	....	....	4	1	5
From 20 to 25 years ..	3	....	3	16	12	28
From 25 to 30 years ..	2	1	3	27	18	45
From 30 to 35 years ..	3	1	4	32	30	62
From 35 to 40 years ..	5	2	7	58	34	92
From 40 to 50 years ..	12	15	27	99	126	225
From 50 to 60 years ..	12	16	28	130	156	286
From 60 to 70 years ..	10	13	23	110	127	237
From 70 to 80 years ..	22	17	39	104	112	216
From 80 to 90 years ..	5	5	10	35	31	66
From 90 to 95 years ..	....	....	....	1	3	4
Total	74	70	144	616	650	1,266

TABLE No. 17.

Showing Alleged Duration of Insanity Previous to Admission of
Patients Admitted During the Year Ending September 30, 1896.

DURATION OF INSANITY.	Men.	Women.	Total.
Under one month.....	26	24	50
One to three months.....	27	19	46
Three to six months.....	14	15	29
Six to nine months.....	11	12	23
Nine months to one year.....	3	8	11
One year to eighteen months.....	11	9	20
Eighteen months to two years.....	2	9	11
Two to three years.....	9	13	22
Three to four years.....	6	7	13
Four to five years.....	4	7	11
Five to ten years.....	17	29	46
Ten to fifteen years.....	25	50	75
Fifteen to twenty years.....	12	28	40
Twenty to thirty years.....	18	27	45
Thirty years and upwards.....	9	4	13
Not insane* .....	....	....	....
Unascertained.....	37	38	75
Total	231	299	530

* Includes cases of alcoholism, morphia habit, etc.

TABLE No. 18.

Showing Period of Residence in Asylum of Patients Remaining
Under Treatment September 30, 1896.

PERIOD OF RESIDENCE.	Men.	Women.	Total.
Under one month.....	13	7	20
One to three months.....	18	15	33
Three to six months.....	98	120	218
Six to nine months.....	50	111	161
Nine months to one year.....	18	20	38
One year to eighteen months.....	31	88	119
Eighteen months to two years.....	40	38	78
Two to three years.....	198	93	291
Three to four years.....	68	52	120
Four to five years.....	77	89	166
Five to ten years.....	176	174	350
Ten to fifteen years.....	96	111	207
Fifteen to twenty years.....	98	89	187
Twenty to thirty years.....	113	147	260
Thirty years and upwards.....	....	....	....
Not insane*.....	....	....	....
Total	1,094	1,154	2,248

* Includes cases of alcoholism, morphia habit, etc.

TABLE No. 19.

Showing the Occupation of Those Admitted During the Current Year
and Since October 1, 1888.

OCCUPATION.	YEAR ENDING SEPTEMBER 30, 1896.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Professional:						
Clergy, military and naval officers, physi- cians, lawyers, archi- tects, artists, authors, civil engineers, sur- veyors, etc	2	....	2	29	5	34
Commercial:						
Bankers, merchants, ac- countants, clerks, salesmen, shopkeep- ers, shopmen, stenog- raphers, typewrit- ers, etc	19	....	19	125	4	129
Agricultural and pastoral:						
Farmers, gardeners, herdsmen, etc	67	....	67	454	2	456
Mechanics, at out- door vocations:						
Blacksmiths, carpen- ters, engine-fitters, sawyers, painters, po- lice, etc	33	....	33	260	....	260
Mechanics, etc., at sedentary voca- tions:						
Bootmakers, bookbind- ers, composers, weavers, tailors, ba- kers, etc	19	....	19	86	....	86
Domestic service:						
Waiters, cooks, ser- vants, etc	1	131	132	18	1,009	1,027
Educational and higher domestic duties:						
Governesses, teachers, students, housekeep- ers, nurses, etc	5	116	121	29	384	413

Table No. 19 — (Concluded).

OCCUPATION.	YEAR ENDING SEPTEMBER 30, 1896.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Commercial:						
Shopkeepers, sales-						
women, stenog-						
raphers, typewriters,						
etc.....	....	2	2	....	3	3
Employed in sed-						
entary occupa-						
tion:						
Tailoresses, seam-						
stresses, bookbinders,						
factory workers, etc.	....	25	25	10	76	86
Miners, seamen, etc...	1	....	1	18	....	18
Prostitutes .....	....	....	....	....	1	1
Laborers	71	....	71	409	....	409
No occupation.....	9	19	28	94	88	182
Unascertained	4	6	10	27	44	71
Total	231	299	530	1,559	1,616	3,175

TABLE No. 20.

Showing the Nativity of Patients Admitted During the Current Year
and Since October 1, 1888.

NATIVITY.	YEAR ENDING SEPTEMBER 30, 1890.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Connecticut	1	....	1	6	7	13
Georgia .....	....	1	1	....	1	1
Illinois .....	....	....	....	3	2	5
Indiana .....	....	....	....	1	4	5
Iowa	1	....	1	1	....	1
Kansas .....	....	1	1	....	2	2
Kentucky .....	....	....	....	....	3	3
Maine	1	1	2	1	2	3
Maryland	1	....	1	4	1	5
Massachusetts .....	....	....	....	14	6	20
Michigan .....	....	1	1	7	3	10
Minnesota .....	....	....	....	....	1	1
Mississippi .....	....	....	....	1	....	1
Missouri .....	....	....	....	1	1	2
New Hampshire	2	....	2	3	2	5
New Jersey .....	....	....	....	9	6	15
New York	133	126	259	929	863	1,792
North Carolina .....	....	....	....	1	1	2
Ohio .....	....	....	....	4	1	5
Pennsylvania	6	4	10	45	27	72
Rhode Island .....	....	....	....	1	....	1
South Carolina .....	....	....	....	....	1	1
Texas .....	....	....	....	1	....	1
Vermont .....	....	1	1	7	6	13
Virginia .....	....	1	1	1	3	4
Wisconsin .....	....	....	....	1	5	6
Armenia .....	....	....	....	1	....	1
Austria .....	....	2	2	3	2	5
Bavaria .....	....	....	....	1	....	1
Canada	2	8	10	20	26	46
Denmark .....	....	2	2	1	3	4
England	6	4	10	46	42	88
France	3	2	5	10	3	13
Germany	16	25	41	109	137	246
Greece .....	....	....	....	....	1	1
Holland .....	....	....	....	3	4	7
Hungary .....	....	....	....	1	2	3
Ireland	29	84	113	169	332	501
Italy	1	2	3	7	3	10
Poland .....	....	....	....	6	11	17

TABLE No. 20—(Concluded).

NATIVITY.	YEAR ENDING SEPTEMBER 30, 1896.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Scotland	1	1	2	6	9	15
Sicily .....	....	....	....	1	....	1
Sweden .....	....	1	1	5	4	9
Switzerland	1	....	1	7	....	7
Wales .....	....	....	....	....	1	1
Unascertained *	27	32	59	122	88	210
Total	231	299	530	1,559	1,616	3,175

* Of the total number admitted since the 1st of October, 1890, the parents of 37 per cent. were both of foreign birth.

In 2 per cent. the parentage on the paternal side was foreign, while that on the maternal side was native.

In 5 per cent. the parentage on the maternal side was foreign, while that on the paternal side was native.

The records in this hospital prior to 1890 do not show the statistics required.

Includes 19 men and 23 women known to be natives of the United States, admitted during the current year.

TABLE No. 21.

Showing the Residence by Counties and Classification of Patients
Admitted During the Year Ending September 30, 1896.

COUNTIES.	Public.	Private.	Total.
Albany	82	.....	82
Allegany	18	.....	18
Broome .....	.....	.....	.....
Cattaraugus .....	.....	.....	.....
Cayuga	30	.....	30
Chautauqua .....	.....	.....	.....
Chemung .....	.....	.....	.....
Chenango .....	.....	.....	.....
Clinton .....	.....	.....	.....
Columbia	10	.....	10
Cortland .....	.....	.....	.....
Delaware .....	.....	.....	.....
Dutchess .....	.....	.....	.....
Erie .....	.....	.....	.....
Essex .....	.....	.....	.....
Franklin .....	.....	.....	.....
Fulton	1	.....	1
Genesee	16	.....	16
Greene	4	.....	4
Hamilton .....	.....	.....	.....
Herkimer .....	.....	.....	.....
Jefferson .....	.....	.....	.....
Kings .....	.....	.....	.....
Lewis .....	.....	.....	.....
Livingston .....	.....	.....	.....
Madison .....	.....	.....	.....
Monroe .....	.....	1	1
Montgomery	1	.....	1
New York	1	.....	1
Niagara .....	.....	.....	.....
Oneida .....	.....	.....	.....
Onondaga	8	1	9
Ontario	32	.....	32
Orange	2	.....	2
Orleans	10	.....	10
Oswego .....	.....	.....	.....
Otsego .....	.....	.....	.....
Putnam	3	.....	3
Queens	25	.....	25
Rensselaer	64	.....	64
Richmond	10	.....	10

TABLE No. 21—(Concluded.)

COUNTIES.	Public.	Private.	Total.
Rockland	2	.....	2
St. Lawrence .....	.....	.....	.....
Saratoga	7	.....	7
Schenectady .....	.....	.....	.....
Schoharie .....	.....	.....	.....
Schuyler	11	.....	11
Seneca	22	.....	22
Steuben	45	.....	45
Suffolk	7	.....	7
Sullivan	2	.....	2
Tioga .....	.....	.....	.....
Tompkins	19	1	20
Ulster	10	.....	10
Warren	4	.....	4
Washington	4	.....	4
Wayne	20	.....	20
Westchester	28	.....	28
Wyoming	8	.....	8
Yates	14	.....	14
State patients	1	.....	1
Soldiers' Home	6	.....	6
Total	527	3	580

TABLE No. 22.

Showing the Residence by Counties and Classification of Patients Remaining Under Treatment September 30, 1896.

COUNTIES.	PUBLIC.			PRIVATE.		
	Men.	Women.	Total.	Men.	Women.	Total.
Albany	79	128	207	....	....	....
Allegany	33	38	71	....	....	....
Broome .....	....	....	....	....	....	....
Cattaraugus	15	2	17	....	....	....
Cayuga	92	72	164	1	1	2
Chautauqua	16	4	20	....	....	....
Chemung	42	44	86	....	....	....
Chenango .....	....	....	....	....	....	....
Clinton .....	....	3	3	....	....	....
Columbia	1	10	11	....	....	....
Cortland .....	....	....	....	....	....	....
Delaware .....	....	....	....	....	....	....
Dutchess .....	....	2	2	....	....	....
Erie	90	11	101	....	....	....
Essex	5	5	10	....	....	....
Franklin	12	9	21	....	....	....
Fulton	15	9	24	....	....	....
Genesee	27	28	55	....	....	....
Greene	3	1	4	....	....	....
Hamilton	2	....	2	....	....	....
Herkimer	6	10	16	....	....	....
Jefferson	1	....	1	....	....	....
Kings .....	....	....	....	....	....	....
Lewis	5	3	8	....	....	....
Livingston	24	28	52	....	....	....
Madison	3	4	7	....	....	....
Monroe	21	11	32	....	2	2
Montgomery	11	11	22	....	....	....
New York .....	....	....	....	....	....	....
Niagara	36	8	44	....	....	....
Oneida	1	6	7	....	....	....
Onondaga	32	39	71	1	....	1
Ontario	68	77	145	....	1	1
Orange	9	4	13	....	....	....
Orleans	23	19	42	....	....	....
Oswego	2	6	8	....	....	....
Otsego .....	....	....	....	....	....	....
Putnam	1	3	4	....	....	....
Queens	16	30	46	....	....	....
Rensselaer	12	85	97	....	....	....

TABLE No. 22 — (Concluded).

COUNTIES.	PUBLIC.			PRIVATE.		
	Men.	Women.	Total.	Men.	Women.	Total.
Richmond.....	....	13	13	....	....	....
Rockland	1	2	3	....	....	....
St. Lawrence .....	....	....	....	....	....	....
Saratoga	12	13	25	....	....	....
Schenectady	9	16	25	....	....	....
Schoharie	1	....	1	....	....	....
Schuyler	30	22	52	....	....	....
Seneca	50	46	96	....	1	1
Steuben	91	73	164	....	....	....
Suffolk	5	5	10	....	....	....
Sullivan	2	....	2	....	....	....
Tioga.....	....	....	....	....	....	....
Tompkins	38	43	81	1	....	1
Ulster	1	25	26	....	....	....
Warren	1	4	5	....	....	....
Washington .....	....	22	22	....	....	....
Wayne	43	39	82	....	....	....
Westchester	14	65	79	....	....	....
Wyoming	16	15	31	....	....	....
Yates.....	29	33	62	....	....	....
State patients.....	25	3	28	....	....	....
Unascertained .....	....	....	....	....	....	....
N. Y. S. S. & S. Home,	20	....	20	....	....	....
Total	1,091	1,149	2,240	3	5	8

TWENTY-NINTH ANNUAL REPORT
OF THE
BOARD OF MANAGERS
OF THE
WILLARD STATE HOSPITAL
TO THE
STATE COMMISSION IN LUNACY
FOR THE YEAR 1897.

TRANSMITTED TO THE STATE COMMISSION IN LUNACY.

WYNKOOP HALLENBECK CRAWFORD CO.,
STATE PRINTERS,
NEW YORK AND ALBANY.
1898.

TWENTY-NINTH ANNUAL REPORT
OF THE
BOARD OF MANAGERS
OF THE
WILLARD STATE HOSPITAL
TO THE
State Commission in Lunacy
FOR THE YEAR 1897.

Report of the Board of Managers of the Willard State Hospital

OFFICERS OF THE HOSPITAL

MANAGERS.

HON. S. H. HAMMOND.....	Geneva.
WILLIAM J. POLLARD.....	Seneca Falls.
JOHN H. OSBORNE.....	Auburn.
ABRAM S. STOTHOFF.....	Watkins.
MARTIN L. ALLEN.....	Seneca Falls.
PROF. J. L. MORRIS.....	Ithaca.
MRS. C. S. MONGIN.....	Seneca Falls.

OFFICERS OF THE BOARD OF MANAGERS

PRESIDENT.

HON. S. H. HAMMOND, Geneva.

SECRETARY.

WILLIAM J. POLLARD, Seneca Falls.

TREASURER.

HON. J. B. THOMAS, Ovid.

ATTORNEY FOR WILLARD STATE HOSPITAL.

HON. S. S. PARTRIDGE, Phelps, N. Y.

RESIDENT OFFICERS**MEDICAL SUPERINTENDENT.****WM. AUSTIN MACY, M. D.****ASSISTANT PHYSICIANS.**

WM. L. RUSSELL, M. D. **FRED'K E. BOWLBY, M. D.**
SAMUEL F. MELLEN, M. D. **CHAS. F. SANBORN, M. D.**
GEORGE O'HANLON, M. D. **ROBERT E. DORAN, M. D.**
THOS. J. CURRIE, M. D. **WILLIAM STEINACH, M. D.**
JOHN W. RUSSELL, M. D.

THE WOMAN PHYSICIAN.**J. ERNESTINE HILLS, M. D.****MEDICAL INTERNES.****EDWIN G. KLEIN, M. D.** **GODFREY PITTIS, M. D.****MATRON.****JULIET W. WYMAN.****STEWARD.****MORRIS J. GILBERT.**

REPORT OF THE MANAGERS*To the State Commission in Lunacy:*

The managers of the Willard State Hospital have the honor to submit the twenty-ninth annual report of this institution for the year ending September 30, 1897, together with the reports of the Superintendent and of the Treasurer for the same period of time.

Respectfully submitted,

S. H. HAMMOND,

President of the Board of Managers.

REPORT OF THE MEDICAL SUPERINTENDENT

Hon. S. H. HAMMOND, *President of the Board of Managers, Etc.:*

Dear Sir.—I have the honor to present herewith to your board the annual report for the Willard State Hospital for the year ending September 30, 1897, with the usual statistical tables.

The following table shows the movement of population for the period referred to:

	Men.	Women.	Total.
Remaining October 1, 1896.....	1,094	1,154	2,258
Admitted during the year.....	172	161	333
Total number treated during the year.	1,266	1,315	2,581
Average daily population.....	1,106	1,152	2,258
Discharged during the year.....	160	162	322

The patients discharged were divided
as follows:

Discharged recovered.....	39	24	63
Discharged improved.....	35	32	67
Discharged unimproved.....	13	15	28
Discharged not insane.....	2	..	2
Died.....	71	91	162
Remaining October 1, 1897.....	1,106	1,153	2,259

During the year there was an increase of 12 men and a decrease of 1 woman, making a total increase of 11. The largest number under treatment on any one day was 2,276, on March 12th, and the smallest number was 2,238, on July 17th and 18th. Of the patients admitted during the year, 217 were brought direct from their homes, 25 were admitted from almshouses, 10 from hotels, 26 from jails, 1 from a city hospital, 46 were transferred from other New York State hospitals and 8 were received from the Soldiers' Home. Of those admitted, 330 were public and 3 were private patients, and there remained at the end of the year 5 private patients. There were 3 patients admitted who were under the age of 15 years; 12.9 per cent. of the whole number were over

70, and of these, 9 were over 80. The largest number admitted were between the years of 40 and 50, and the second largest number were between the years of 50 and 60. The percentage of recoveries, calculated upon the daily average population, was 2.8 per cent. If calculated upon the number of admissions, it would be 18.9 per cent. Of the 160 patients discharged, 14 were transferred to other State hospitals in this State, 58 were discharged at the expiration of parole, 79 went direct to their homes and 9 eloped. The death rate for the year was 7.1 per cent.

It is a source of regret that we have to record one death by suicide occurring during the year. One of the patients, a woman, managed to elude the vigilance of our attendants, and, escaping from the ward, threw herself into the lake and was drowned, on October 1st of this year. No other fatal accidents occurred.

AMUSEMENTS.

The amusements for the year past have been very similar to those mentioned for the preceding year. Until the outbreak of diphtheria at this hospital necessitated the quarantining of the patients and the discontinuance of amusements at Hadley hall, weekly dances for the patients were held as formerly, and a number of entertainments of various kinds were provided from the amusement fund. When the quarantine maintained at this hospital compelled us to discontinue this practice, the patients were amused as best we could on the wards, and amusements of a more general character were resumed as soon as the quarantine was raised. During the summer the steam yacht has been in requisition on a number of occasions, and parties of patients have been taken up or down the lake on excursions, besides giving them short sails in the immediate vicinity of the hospital. This has enabled us to give a very pleasant recreation to a very large number of the inmates and one that was very much enjoyed. One or two smaller parties of patients were taken to Geneva, and on two occasions parties of patients were taken to Watkins Glen, the trip forming a very

pleasant outing for them. The games of baseball were continued during the summer on Saturday afternoons, and music was given by the hospital band. Other concerts by the band were given regularly during the summer on two afternoons each week. The Field Day was held in September, as usual, and was very largely attended, the contests being greatly enjoyed by the patients. The school for patients, which was started prior to my connection with this hospital, under the charge of Dr. Francis M. Hamlin, has continued to be an attractive feature of the institution for the patients. Many of the patients, as they have become convalescent, have had their interest stimulated by sending them to school, and many have afterwards become very useful patients while remaining in the institution.

THE SYSTEM OF PAROLE.

A limited system of parole has been continued during the past year, and I have tried to make the distinction in almost all cases, that the parole should only be given to such patients as were willing to perform some useful duties in connection with the hospital work, and I have found good results from this, many of our patients taking active part in the various industries and work of the institution who had refused to do anything before they were given the extended privileges that were possible under this system. In my opinion, the number of patients that can be given paroles must necessarily be comparatively limited in an institution of this kind. There appears to me to be a large element of risk in extending it too far, and I have tried to have the cases that were given the privileges referred to selected as carefully as possible from the class of patients from whom there would be comparatively little risk, and who, should they elope, would be able to care for themselves and not likely to annoy or injure others.

OCCUPATION.

The matter of the occupation, as well as the diversion of our patients, has been a matter of constant study with us, and while

this matter has been pursued for a long time at this hospital, I am gratified to be able to report that the number of cases engaged at useful occupations has been somewhat increased during the past year. Owing to the fact, as previously noted in our reports, that the population from which our patients are drawn is chiefly agricultural, comparatively few tradesmen are found among our patients, the majority being either farmers or storekeepers. This limits the work to a certain extent, in the matter of the industries that can be pursued, although we find here, as elsewhere, that many of these cases, if taken at the proper stage of their disease, can be trained at various kinds of work, even if they have known nothing of it before. As far as has been possible, the patients have been selected to work at such occupations as are taken up by the paid help of the hospital, and in extending the shoemaking and other industries. The making of shoes has been considerably extended, and we now have some six patients regularly employed and expect to be able to extend this matter still more. We have obtained material and machinery for the manufacture of baskets and brooms and with the coming winter expect to make these articles in the hospital shops. All of the upholstering for the hospital has been done by the patients with the aid of one or two of the attendants who have been skilled in this work. Some of the men have also assisted with the painting, etc.

The tailor shop and sewing room, the laundry and the kitchens have all given occupation to a large number of patients, and all the clothing for the patients of the hospital has been made in our own workshops.

WORK OF THE MEDICAL STAFF.

The work that I have to mention under this head has been much of the same character as that noted in the previous report. The medical staff held a number of monthly meetings during the year, at which times papers and abstracts from the journals, etc., were read, discussion being conducted by the entire staff, and the formal weekly conference was held on Tuesdays where all mat-

ters relating to the institution, both administrative and as regards the treatment of special cases, etc., were talked over and discussed.

Concerning the special medical treatment, I have little to report except to state that the experiments of the former year with carongen, thyroid extract and some other of the new remedies were carried forward. These examinations and investigations contributed considerably to our knowledge of the value of these agents, and of the remedial measures investigated, but I will make no special report concerning them in detail, as I do not consider that the results obtained were positive enough to warrant the going into the matter in an extended way. Of course with a large number of these agents investigated, while we get from some of them, aid in various directions, it is hardly to be expected that specifics will be very frequently discovered.

Dr. John S. Kirkendall, of Ithaca, has continued his work during the year, in connection with our own, in the examination and treatment of all special eye cases among our patients. I am pleased to report that the Doctor's work has been of very considerable value to us in this direction, and that he has been able to relieve a large number of our patients of very unpleasant symptoms that have shown themselves in their cases. A number of patients have been operated upon, and with quite a number, the fitting of proper glasses alone has afforded them great relief.

TRAINING SCHOOL FOR NURSES.

The training school has been carried on as usual during the past year, and a great deal of interest was shown in the work by the employees. The senior class numbered ten men and twenty-one women, and of these twenty-two, or 71 per cent. graduated at the close of the session and obtained diplomas. The junior class consisted of nine men and nine women, and of these, sixteen, or 89 per cent., were advanced at the end of the session to the senior class.

EPIDEMIC DISEASES, ETC.

In the month of February diphtheria developed in this hospital, the initial case being in my own family. Following this case we had in all six well recognized cases of diphtheria, and four cases in which, while there was no membranous exudation, the Kelbs-Loeffler bacilli were found by bacteriological examination to be present; the last case of the former class occurring as late as August. Besides these cases, the employees of the hospital suffered very extensively from sore throat. This latter trouble was not confined to any particular building, though the diphtheria seemed to be limited to the main building, and detached buildings Nos. 2 and 3, but, I would state that the fact of our finding the germs of diphtheria in a number of cases of sore throat investigated by bacteriological examinations of the secretions of the throat, caused us to feel there was grave suspicion, that a large number of the cases that would otherwise have been considered not suspicious, might have been genuine cases of diphtheria. The cause of this outbreak was very carefully investigated into both by ourselves, and later, at our request, by Dr. F. C. Curtis of the New York State Board of Health, who came to the hospital for the purpose of making a special examination into the matter; but, while the disease was known to have been brought into the hospital in one or two of the cases, it was impossible for us to clearly determine what the causes were in the other cases. We did learn, however, that numerous cases of diphtheria developed in quite a number of places scattered over the hospital district from which this institution received patients, and it is very probable that the disease was brought into the institution in this way. I append the report made by Dr. Curtis of the State Board of Health, which was sent to us by Dr. Baxter T. Smelzer, secretary of that Board. I also append with this report, although it was received at a later date, a special report from Dr. Smelzer, on the possible contamination of the drinking water at this hospital, which subject was looked into during the course of our investigations into the possible cause of the outbreak of diphtheria.

A case of scarlet fever developed among our patients, and in this instance the patient undoubtedly brought it from his own home, although we had no knowledge, until after he showed the disease at the hospital, that he had been subject to any contagion, the history that we obtained, however, on investigating the case, showed that he had been in contact with patients suffering from what was supposed to be measles but which, from the full description that we were able to obtain, was undoubtedly scarlet fever.

From an examination into the conditions relative to the water supply and sewerage system of the hospital, I would state that there seems to be some reason to feel that there is a possible danger from sewage infection, and that, while it has not been the cause of any great amount of trouble in a number of years, since the last severe epidemic of typhoid fever, it is possible that it may be very harmful at some time in the future, should the necessary conditions operate to produce disease. The intake pipe, through which the drinking water supply is obtained, runs diagonally into the lake at a point slightly to the south of the hotel, situated on the lake front. This pipe is continued about 1,300 feet into the lake and, at its end, is possibly some 20 feet below the surface of the water, at the bed of the pipe, the end being projected upwards some three or four feet from the bottom, and having a sieve or screen upon it. To the south of this pipe, the different sewers of the hospital empty into the lake, the main sewer being carried into the water a distance of some 1,000 to 1,400 feet south of the pipe, while still further south the other sewers from the laundry, detached building No. 2 and detached building No. 4, also empty. The prevailing winds being from the southwest, it follows that the sewage, particularly that from the sewers farthest to the south from the inlet pipe, spreads out after leaving the pipe, and is distributed so that it is carried constantly in the direction of the water pipe, a large proportion of the sewage, of course, being deposited along the shore, while there is an opportunity for some of it to reach the end of the

water pipe, under certain conditions of wind and water. This is more especially the case when storms occur, and the water forms eddies by its being driven off from the shore. This matter is gone into in Dr. Smelzer's report, and our attention was attracted to it by our having investigated in every direction to try and ascertain the cause of the conditions prevailing at the hospital, which led to the extension of the diphtheria and sore throat which occurred during the past winter and spring. While we are not of the opinion that the diphtheria was directly traceable to any conditions relating to the drinking water, it is possible that, in an indirect way, the water may have affected the general health of the people to such an extent that they may have been in a more receptive condition to contract disease. I have consulted a number of gentlemen who have given more or less attention to the disposal of sewage, and problems of this kind, and, without an exception, they have expressed themselves as thinking that our system might become, at any time, a possible source of serious danger to our people. This naturally has caused the consideration of conditions of this kind to be taken up, and, in view of the necessities of the case, I think that the matter should be thoroughly investigated by a competent sanitary engineer, and some satisfactory method arrived at of changing these conditions.

IMPROVEMENTS—OUTSIDE WORK.

During the latter portion of the winter and spring a road was built down and along the north bank of the ravine opposite detached building No. 1 to enable us to bring stone more readily from the quarry, and the tool houses, that previously had been at the top of the bank in a very unsightly position, were removed to sites on the side of this roadway. A small brick building was also erected near the same location for storing the powder and dynamite used for blasting. The old temporary icehouse, formerly placed under the trees near the old tool houses, was rebuilt at a point some 200 yards or more east of the site of the new tool houses in the ravine, where it is sheltered by the trees,

and I am pleased to state that the erection of this building enabled us to store a very large quantity of ice during the winter, which we would otherwise have lost, very much more than repaying the cost of the material used for the purpose.

The work of cementing the floors at detached buildings Nos. 2 and 4 was completed early in the season. These buildings will have to be underdrained later, but we think that most of this work can be done without interfering with the cement floors as laid.

The chicken house to the eastward of the infirmary was removed to the Meddick farm, as this was in a very unsightly location, and the chickens formerly cared for at this place were distributed among the others in the chicken houses along the north bank of the ravine near the farm-house.

The entire lawn surrounding the branch was graded and underdrained, and cement sidewalks were built from this building to connect it with the main walk on the north used for the exercise of the patients. The large mound of dirt at the southeast of the Branch was removed and utilized in doing the grading around the building. This formed a runway to the old coal bins and trestle, but as they were no longer needed, we have begun to take them down, and we hope that, by another spring, the grounds around this building will present a very pleasing and attractive appearance.

Shale walks were constructed between detached buildings Nos. 2 and 4, and the grading of the lawns at the east of these buildings was finished and the grounds seeded. Considerable grading was done about Hadley Hall, and the grading of the grounds used in connection with the cinder path and exercise field for the patients was completed and the ground seeded. The grading was also completed and the ground seeded around the electric light plant, and this building was connected with the main walk by cement paths, and work of the same character was begun and has been partially completed in the neighborhood of the Employes' Home. The grounds were also re-graded and seeded in the south court

yard east of the main building. This ground was partially covered by the location of the buildings that were burned, and considerable remains to be done at that place, but the work is in progress, and with the completion of the cement paths which are being built across the ravine to connect the main building with the laundry and detached buildings Nos. 2 and 4, and with the addition of some shrubbery and a few well built roads to enable us to handle our stores, provisions, etc., to advantage, the grounds at this side of the building will be much improved.

With the permission of your Board, and entirely with labor of patients under the direction of their attendants, a five foot cinder path was built from the railroad track east of the branch to the limit of the State grounds, northeast of the upper reservoirs. This path or walk is a great convenience, particularly to the employes of the hospital, and forms an attractive feature in connection with the grounds, giving them a much more finished appearance along this approach.

Cement gutters were laid from the leader pipes on both sides of the north wing to the main sewer and this work will be carried on, both at this and the other buildings, where needed, as long as the pleasant weather continues, and we hope that, as a consequence, our cellars will be very much drier during the coming winter.

The returns from the farm, which is chiefly carried on with the aid of patients' labor, will be referred to in the steward's report on this subject, and I will, therefore, not mention in detail the many kinds of work done, except to say that the labor of patients has been utilized as far as possible in all the departments in which we have paid employes engaged. The handling of stone, wood, coal, caring for cattle, the ordinary farm work, and many other matters are only items of daily routine, and would be so numerous as to make the report burdensome if mentioned in detail.

WORK DONE BY THE CARPENTER'S DEPARTMENT.

In an institution of the size of this hospital, miscellaneous work of the character of permanent improvements is constantly being accomplished, and it seems, therefore, hardly necessary, in addition to the data contained in this report, to refer to the various work, of detail repairs, etc., that has been conducted and carried out during the past year. The principal repairs and the extraordinary repairs and betterments that have been either undertaken or completed during the year, are as follows:

The old gas house was remodelled to some extent, the west portion being fitted up as a blacksmith shop, and the east portion prepared by putting in a cement floor and additional windows and ceiling the room overhead, as well as providing support for hangers and shafting, to enable us to use this as a machine shop.

When this work is completed we will be able to separate the machine shop from the carpenter shop, improving both departments very considerably.

A new greenhouse, 20 feet by 166 feet, was purchased in the rough from funds previously allowed the hospital by the State commission, and this is now being constructed upon the hospital grounds.

An amount of money was allowed for the construction of new piggeries and a requisition was approved by the commission to allow us to build new buildings east of the main railroad track and south of the branch, so that we can take down the old piggeries which have been so long a source of annoyance to the hospital. This work is hardly likely to be completed this winter, on account of the advance of the cold weather. We hope, however, to put in a cement floor and to get things well in hand so that, with the opening of the coming spring, the building can be at once erected and the old ones discontinued. We expect to use a portion of the old buildings in the construction of the new ones, and it is principally on this account that the new buildings cannot be completed until it will be safe to do away with the shelter for the pigs in cold weather.

Trouble was experienced between the hotel and the lake by the washing out of the road near one of the main conduits, which had become clogged during the spring rains. A new conduit with a large manhole was put in at this point, to enable us to easily clear out the conduit in case this accident should happen again.

Steel ceilings were put up in the main kitchen, the steward's office, in the entrance hall to detached building No. 3, the halls of wards 1, 2, 4, 5, 6, 7 and 8, and the day rooms of wards 4 and 8 of detached building No. 3.

The work of remodelling the main kitchen was carried to completion, and when this room is provided with some additional kitchen equipment, the hospital will have an excellent kitchen for the main building.

The steward's office was enlarged and a fireproof vault for the preservation of the hospital records provided, and this work has been completed.

The old frame building situated near the laundry was ceiled, pockets and shelving were put in, together with an elevator suitable for laundry purposes, and this building will now be moved to a position at the north end of the laundry building, so as to use it as an adjunct to the sorting and ironing-room, and in connection with the linen clerk's department.

A new piazza was built at the steward's house.

The internal arrangement of the storage building was slightly changed, the sewing-rooms being placed on the second floor, where they could be managed together, and the shoeshop and other industries, formerly carried on on two floors, were transferred to the large room at the east end of this building. This enables us to put all of the stores, consisting of dry goods, clothing, etc., on the first floor, the linen clerks using that portion at the south end of the building for the storage of newly-made goods, etc.

A large bookcase was made for the manager's room to enable us to spread out and use to better advantage the medical library that belongs to the hospital.

Tile floors were laid in the corridors between the wards of the main building opposite the entrances to the water-closets and washrooms in wards 3, 6, 7, 8 and 9 of the south wing, and in the washrooms of wards 7, 8 and 9 of that wing.

WORK DONE BY THE ENGINEER'S DEPARTMENT.

The corridor immediately beneath the hallway leading from the center to the south wing was fitted up as a scullery and vegetable-room, and was heated with steam. This enables us to take this kind of work out of the main kitchen, and in that way to improve its ordinary appearance.

A new pan rack was made of galvanized iron pipe for the main kitchen, and this has proven very satisfactory and will be used as a pattern in furnishing the other buildings. We are indebted to Dr. Howard of the Rochester State Hospital for the drawing from which this was made.

The heating and supply of steam in the entire main kitchen was changed so as to accommodate the new arrangement in the enlarged room.

The water-closets in the storage building were changed to accommodate the new arrangement of the patients working there in the several departments.

Steam connection was made, radiators placed, etc., for heating the new annex to the laundry referred to heretofore.

The steam plant for heating the Superintendent's house was partially changed to a system of direct radiation from the indirect radiation. This was done for the reason that the house was extremely cold during a portion of last winter, and it seemed very difficult to satisfactorily heat the building. This building also had its sewer line changed so that now it has an independent exit to the lake. The cistern formerly placed in the basement of this building was taken out and placed immediately outside of the building, in the ground.

WORK DONE BY THE PAINTER'S DEPARTMENT.

The employes' home, icehouse and meat shop, the carpenter shop and sheds, and the building in which the electric light plant and fire department are located, were all painted on the outside to correspond with the main building. In the matter of inside work, I would mention the painting and decorating of the main entrance and corridors at the main building, the laying of linoleum in the corridors leading to the wards from the center, in this building, and the painting of the sleeping-rooms at the rear of the center. A number of the physicians and officers' rooms were also painted and papered, and the officers' dining-room, the steward's office, the staircases and hallways were also painted. Linoleum was laid throughout the main hall and in the steward's office, and we find the use of this material in these rooms and in the corridors and hallways a very material improvement. Formerly, it was our custom to polish these floors with paraffine, and we found that this took the time of a skilled mechanic throughout the larger part of the year. Since the linoleum was put down, we find the hallways and corridors very much more quiet than they have ever been before, and the work of keeping the floor in condition is done entirely by the patients on the adjoining wards. The same applies to the hallways in the front portion of the building. I would draw attention, in this connection, to the fact that two of the main wards, in which we have respectively thirty-nine and twenty-one patients, have had broad strips of linoleum through the center, in one case for three years, and in the other for five years. These halls are very much more quiet than the ones with bare floors, and the linoleum shows little or no wear, even after this service, and the polished portion at the sides of the linoleum is very easily kept in order, and with but very little trouble. It is quite an open question as to whether the use of the thick linoleum that we use for this purpose, where its use is applicable, is not a matter of considerable economy to an institution.

In the main building on the north wing, wards 1 and 8 were painted and decorated throughout, including the rooms attached to the wards. In wards 6 and 9 new metal ceilings previously supplied were painted, and they, together with the remainder of the wards, were touched up so as to be in a presentable condition for the time being.

On the south wing, ward 3 was painted and decorated throughout, including the side rooms, and the ceilings were painted in wards 5, 6, 8 and 9, besides doing the touching up required to make these wards presentable.

The side walls and ceilings of the main kitchen, scullery, wash-room and dining-room were all painted.

At detached building No. 1 the entire building was painted and decorated throughout. This building is 550 feet long, and with the sleeping-rooms, gave quite an extensive area for our painters to cover, but it was in a wretched condition, and the work done by the painters is a very great improvement.

At detached building No. 2 the main wards and some of the rooms were painted and decorated, and linoleum was placed on the treads of the stairway, and in the hallways leading from the wards to the stairs.

At detached building No. 3 the bathrooms and water-closets were painted and enamelled, and a number of the other rooms were also painted, besides touching up the other rooms where necessary.

At detached building No. 4 the wards of the entire group of buildings were painted and decorated. This building is of about the same size as detached building No. 1. Linoleum was also placed in passage ways and stairways, and on the floor of the main hall at the entrance of the building.

At the infirmary the paper, which had become very dilapidated in its appearance, was carefully scraped from the wall, and this building was done over in water colors. This method was followed in the interest of economy, as we were anxious to see whether it would prove a good substitute for the oil painting

which we have always followed heretofore in the hospital work, and I regret to state that the success has not been what was bespoken for it. When finished the building presented a very neat and attractive appearance, but we find that the walls are very easily soiled and have to be constantly gone over in order to keep them presentable.

The steamer "Nautilus" was painted early in the summer and put in condition for the work of carrying the patients on their outings, and in going across the lake for patients obtained on new commitments, etc.

Besides the above work specified, some three thousand pieces of furniture were varnished and repaired during the year, and the carriages, sleighs, etc., were painted as became necessary; and other work of a miscellaneous description, including glazing, etc., was regularly attended to.

During the past year a large amount of work was done on funds that were previously allotted by the State Commission under former apportionments, and some work, such as that spoken of hereafter, and that of the piggeries, greenhouse, motor for machine shop, etc., is included under the amount shown on table No. 2 as expended for extraordinary improvements, and this amount, \$50,090.79, includes also bills that were rendered during the month of October, 1896, for work completed about the close of the preceding year. Among the more important items included under this allowance were the following:

Important changes in the electric light plant, including an entirely new switchboard for the plant, and the rewiring of the storage buildings, with controlling switches for this and a number of the other buildings; the final work on the laundry and storage buildings, including steamheating, etc., was completed; the sewing-rooms in the storage building were provided with additional sewing machines run by electric motors; a number of tailor's electric irons were provided; a new cow barn was built and turned over to us by the contractors; nearly \$4,500 worth of new apparatus was provided for the various kitchens; considerable addi-

tional furniture was supplied; the steamer dock was repaired and the cribs under the dockhouse rebuilt; piazza floors were renewed at the infirmary; a number of the cellar floors in the outlying buildings were cemented and the basements drained; considerable of the plumbing was overhauled; the wards in the main building were provided with junction boxes on all of the electric light circuits; a large number of new fire extinguishers were purchased; considerable money was expended in putting the railroad around the grounds in good condition and rendering it more safe; machinery was purchased for the manufacture of brooms; extra typewriters and a mimeograph were purchased for the main office; blacksmith's tools were purchased to enable us to do our own work; a new armature and sleeve for one of the electric dynamos was purchased; window screens and awnings were purchased; about \$1,500 was allowed us on a former allotment for services of plasterers and masons in making repairs to the buildings, and material was purchased for the extension of the pipes in the fire system around the main building.

Besides the items mentioned above, a large amount was expended in small sums for various matters in the way of general or special improvements. Some of these items are possibly included in last year's report, but are again mentioned here for the reason that the work was finally completed during the period covered by the present report, and the total amount expended for extraordinary improvements probably includes some matters which were completed prior to the beginning of the year, but for which bills were rendered after the 1st of October, 1896.

NEEDS OF THE HOSPITAL.

In reporting on the various matters under this caption, that I consider it advisable to bring before your Board, I would respectfully state that, owing to the small amount of money the State Commission in Lunacy have been able to give us during the past year, little or nothing has been done in carrying out the work that was outlined in the report for 1897. The Commission allowed

us money with which to purchase an electric motor for fitting up a machine shop in a building formerly used as a gashouse, and this work has been very satisfactorily progressed with, and I trust that we will be able to move the machinery from the old building used between the carpenters and the engineers and to have a well-appointed workshop for the machinists in this building.

Additional facilities were also accorded us by the Commission, by their allowing the hospital a special employe both for the position of blacksmith and that of tinsmith, and we are now doing all the iron work, horseshoeing, etc., that we formerly had done outside, at our own shop, and have found this a matter of considerable saving to the hospital. The tinsmith does a large proportion of our repairs, and will also be utilized during the coming fall in superintending such repairs as will be necessary in putting the roofs of the various buildings in order to meet the coming winter. We were also allowed by the Commission to purchase cement and sand for the extension of our sidewalks from the main building across the ravine to the new laundry, and connecting with detached building No. 2. Sufficient material was granted for this purpose to enable us to put down very satisfactory walks south from the center of the hospital, and these will be a great advantage to us in wet weather.

With the exception of these matters reported, very little has been done concerning any of the work for which appropriations were asked in the last report of this hospital, for the reason that none of the funds were allotted to us, as requested. The outbreak of diphtheria and the consequent anxiety because of the unsanitary conditions that have been previously reported, both in the matter of the plumbing and the water supply, caused us very great concern, and these matters were carefully gone over again, and referred to the State Commission in Lunacy, with the request that allotments might be made for the purpose of carrying out new work in the matter of providing an additional water supply for the branch and the east buildings, as formerly outlined in the report made by Prof. Eldredge of Cornell University, concerning his investigation of the present water works system

at Willard State Hospital, made by him for the former board of managers, and containing suggestions that were printed in the last report concerning the needs of the institution in this regard and suggesting the equipment that would be necessary to make adequate provision for the wants of the hospital. This matter, at the writing of this report, is still in the hands of the said commission. We were able to use the water from the east reservoirs until the commencement of the warm weather, but at that time it became so foul and so badly smelling that we had to discontinue its use entirely for drinking water, though we regret to state that it was necessary for us to continue to use it as potable water for the building known as the branch. The infirmary and detached building No. 3 were supplied by using a small auxiliary pump at the electric light station, and pumping up water from the reservoir, supplied from the lake, to cisterns between the said buildings and the branch, and allowing the supply to come back from these cisterns. The branch obtained its drinking water from wells. The supply of water for the east buildings is undoubtedly entirely inadequate and the quality of water cannot be improved except by getting a supply from the lake, as described by Prof. Eldredge's report. It is extremely urgent that this matter be taken up at the earliest possible moment, and it is greatly to be hoped that we may succeed this year in having the improvements made that are required in this direction. I append a copy of Prof. Eldredge's report, printed with your report last year, and would respectfully urge the great importance of having the work described carried through to completion at the earliest possible moment. The fact that we have gone for years at this hospital without any serious epidemic of typhoid fever and other disease of a contagious nature, does not assure us, particularly while we know that we have to deal with the unsanitary conditions that at present exist, in such a lamentable way, that we will continue in the future, as in the past, to be free entirely from troubles as much to be dreaded as those mentioned. Should any germs of typhoid fever be carried

into the water supply from the rain shed, as could so easily happen where we know that we are collecting water that may be more or less contaminated, it is possible that the results to the hospital would be extremely grave, and results of this kind would be more to be apprehended from a drinking water supply obtained under present conditions for the east buildings, than from that obtained from Seneca lake for the buildings on its border.

Certainly any conditions of this kind deserve very thorough consideration, and all necessary steps should be taken to place an institution such as ours in a thoroughly sanitary condition.

The amount of money asked for during the past year by your board for the increased water supply was \$25,000.

The State Commission in Lunacy was also requested by the board, in view of the extremely unsanitary conditions of the main building, where the principal number of cases of diphtheria developed, to furnish the hospital with means for renewing and remodelling the entire system of plumbing for this building. This plumbing can only be described by saying that it is worn out, of antiquated pattern from present standards, having been put in, in the neighborhood of thirty years ago, the soil pipes being of very light iron and in many cases filled with rust holes; and nothing effectual can be done with it, except by renewing the entire system.

At the direction of the Lunacy Commission, Mr. Henri D. Dickinson, a sanitary engineer of New York city, was employed to draw up specifications, and it is to be hoped that, during the coming season, this work can be very thoroughly done in order to remove a source of danger that has long been present at the hospital.

Mr. Dickinson's report will be found appended to my report. In this connection, I desire to call attention to the necessity of renewing the plumbing in the remaining buildings. The only building of the seven principal buildings at this hospital that has modern plumbing, is detached building No. 3. This was done a little over a year ago, and very satisfactorily, under plans and

specifications prepared by Mr. Wm. Paul Gerhard, a sanitary engineer. In all of the remaining buildings the plumbing is extremely poor, and as referred to in Dr. Mabon's report of last year, "should be removed and new substituted" as soon as possible. The doctor's recommendation was that each year one or more of these buildings should have "all the old and foul plumbing removed and new substituted," and this I cannot too strongly endorse. Aside from the trouble in these buildings from the old and foul plumbing, the method of bathing is entirely antiquated, nothing being had in any of the buildings except the commonest kind of old iron bath-tubs, that are kept as clean as may be by painting from time to time, with the exception of the improved fixtures recently supplied in detached building No. 3.

It is our intention, at the suggestion of the Lunacy Commission, to provide bathing rings in connection with some of these baths, and we hope in this way to improve to a slight extent the conditions now prevailing, but a more radical measure should certainly be adopted, and it would be desirable, while retaining appliances in some of these wards for occasional bathing, to have in each of these buildings a combined bath and dressing-room, which could readily be obtained at comparatively moderate cost, so that the bathing could be done as speedily as possible and under a better supervision than could heretofore be had, because of the baths being scattered throughout each building, one on each of the different wards. This system has been suggested in connection with the new plumbing at the main building, and would, I am sure, not only be much more advantageous in the ways described, but it would also result in a saving of space that could thereafter be utilized as room for additional patients. The reference to the bathing facilities suggested for the main building, suggests, and I would respectfully add in this connection, concerning the requests made for the preceding year in the matter of bath houses, that if the allowance is made us by the Lunacy Commission for the matter referred to, it will enable us, for the time being, to handle our patients very much better than heretofore as regards the bathing at the main building, but it

will not altogether fulfill the requirements of the institution. The bath houses asked for last year were expected to provide not only additional bathing facilities, but also clothing rooms which would enable us to bring together at a certain point and under a few employes, the clothing for each wing in the respective clothing-rooms, instead of having it scattered around, some on each ward, as is now the case. If this should be carried out, there would also in this way, be a direct saving to the State in the amount of room for additional patients that would be had by giving up the clothing rooms and using them for sleeping quarters for these patients. It is, therefore, to be hoped that the matter of the erection of these bath houses will be carried out. The amount shown, as asked for, for their erection, is based on the estimate prepared under the direction of your Board last year.

In addition to the matters above outlined, there are many other requirements for which the need of money for this hospital is very apparent. In an institution as old as ours, and particularly in one originally designed for chronic cases only, much has to be done to equip and establish an effective service for caring for acute cases. Certainly a great deal has been done in this direction, as any comparison of the present furnishing of the hospital will show, to those at all familiar with it in the past, and the greatest strides have been made within a comparatively short time past, particularly during the preceding year. If we could duplicate for a few years the work that was made possible by the allotments of money given to my predecessor, Dr. Mabon, it would take but a short time to place this hospital in a position as well calculated to do this work of caring for and treating the insane as any other institution of the kind.

To do the work outlined by the former board of managers, and asked for by them in the last report, the following amounts were specified in their report:

Increased water supply.....	\$20,000
Two bath houses.....	25,000

Hospital for acute cases.....	\$25,000
Cottage for working patients.....	16,500
Cold storage	14,500
Heating apparatus	20,000
Electric light equipment.....	16,000
Plumbing	15,000
Piazzas	5,000
New floors	6,500
Sidewalks	1,500
Steel fence	7,500
Steel ceilings	3,000
Furniture	5,000
Painting	3,000
Machine shop and equipment.....	4,000
Tiling	5,000
Pathological laboratory	800
Farm implements and tile.....	750
Farm fences	1,200
Silo	3,500

The items of the increased water supply, the bath houses and the plumbing for the main building, have already been discussed, and I will therefore only add such comments as may apply to the other requests. Under these captions I quote in full from Dr. Mabon's report the following, giving each paragraph a reference item number:

No. 1. HOSPITAL FOR ACUTE CASES, \$25,000.

"I would emphasize the necessity for this building. The Willard Hospital was primarily constructed for the custodial care of the chronic insane, and no special provision has ever been made for the scientific treatment and care of acute cases. Since, under the State Care Act, we are now receiving large numbers of the latter class, provisions should be made for their speedy restoration to health.

No. 2. COTTAGE FOR WORKING PATIENTS, \$16,500.

We can increase our accommodations by erecting a cottage for working patients on the lake farm, where we have about 200 acres of land. The farm-house now located there is too old and dilapidated to permit rebuilding and enlarging. At a per capita of \$550 such a building could be constructed for thirty patients for the above mentioned sum.

No. 3. COLD STORAGE, \$14,500.

The present quarters for the meat supplies are entirely too limited. I would urge that the sum above named be allowed for the purpose of cold storage, in order that a building might be erected and a refrigerating plant installed such as would meet our requirements not only for the present, but also for the future. This sum is a moderate estimate when we consider the large population of the institution and the great quantities of meat which have to be stored. In addition, a building of this kind would provide a proper place for the storage of butter, fruit and eggs and other perishable products.

No. 4. HEATING APPARATUS, \$20,000.

The heating and ventilation of the main building is so defective as to require the introduction of an entirely new system. During severe weather it is impossible to heat certain wards, and inmates have to be transferred to other wards to insure any degree of comfort.

No. 5. ELECTRIC LIGHT STATION, \$16,000.

Two new direct connected dynamos and an engine should be installed in our electric light station to provide for the increased number of lamps required. The present plant is now inadequate to the needs of the institution.

No. 6. PLUMBING, \$15,000.

Each year one or more of the detached buildings should have all of the old and foul plumbing removed and new substituted.

The unsanitary and old fixtures require more water for the flushing than modern ones, and the introduction of the latter would result in marked economy at our pumping station. On many of the wards of the main building the plumbing is as poor as can be found in the State, and the only wonder is that more sickness has not resulted therefrom.

No. 7. PIAZZAS, \$5,000.

All of the detached buildings are severely plain, and much could be done at small expense to make them attractive by erecting piazzas. Should we do this it would be possible for the aged and infirm to receive the incalculable blessing of air and sunshine, while at the same time a protection to all on rainy summer days would be afforded.

No. 8. NEW FLOORS, \$6,500.

The floors at D. B. 2 and D. B. 4 are practically worn out, being rotten and sagging everywhere, and in many places the supports are decayed and dangerous. The work of renovation cannot longer be delayed, and new floors should be laid at the earliest practicable date.

No. 9. SIDEWALKS, \$1,500.

We desire to prosecute the work of laying cement sidewalks and gutters, and the sum named will be ample for this purpose.

No. 10. STEEL FENCE, \$7,500.

During the summer months the hospital grounds are overrun with visitors who do not always manifest proper consideration for our patients, but do display an unrestrained, morbid curiosity to see those who are not proper subjects for the gaze of mere sightseers. Excursionists land at the steamboat dock, and, unless carefully watched, use the ground for picnic purposes, scattering papers and rubbish in their path. The wooden fence on the north of the garden is no protection against marauders, who climb over or under and help themselves to vegetables and fruit,

despite the efforts of policemen and attendants. These annoyances could be overcome by erecting a steel fence eight feet high, with sharpened pickets, extending from the lake to the public highway east of the infirmary. It is estimated that such a fence would cost \$1 a foot, including gates, posts, etc.

No. 11. STEEL CEILING, \$3,000.

Many of the wards and day-rooms in the cottages should be provided with steel ceilings, as the plastering is so old and loose as to be a constant source of danger to the occupants.

No. 12. FURNITURE, \$5,000.

Much remains to be done in furnishing. The constant wear and tear upon furniture by the population of a hospital for the insane, necessitates frequent renewals, and here, as elsewhere, it is economical, in the long run, to purchase the best.

No. 13. PAINTING, \$3,000.

All the buildings for patients on the hospital premises are much in need of painting inside and out. If this sum is allowed it will greatly improve their condition from all points of view.

No. 14. MACHINE SHOP AND EQUIPMENT, \$4,000.

The present machine shop is inadequate for our growing needs and increasing population. It occupies room which should properly belong to the carpenter and other mechanics. The old gas house could be utilized for this purpose, and \$1,000 would make the necessary alterations.

When this change is made, the equipment should be increased by the purchase of a machine capable of cutting pipe from four to twelve inches, which would cost \$2,400. A lathe could also be obtained at an approximate cost of \$600.

No. 15. TILING, \$5,000.

Tile floors should be laid in the kitchen of D. B. 1 and the infirmary, as well as in some of the dining-rooms of the cottages.

These latter places, with their old, decayed and water soaked floors, it is now almost impossible to keep clean.

No. 16. PATHOLOGICAL LABORATORY, \$800.

This sum is asked for the equipment of a laboratory for the care and preservation of specimens, and for pathological research, which, with our present appliances, is confined within quite too narrow limits.

No. 17. FARM IMPLEMENTS AND TILE, \$750.

We require farm wagons and implements to replace old and worthless ones. Some of these have done duty almost from the time of the opening of the institution.

No. 18. FARM FENCES, \$1,200.

More wire fence of the Page pattern is needed to protect our farming lands.

No. 19. SILO, \$3,500.

In order to feed our cattle most economically and obtain the best results from our land, it would be well to use ensilage for fodder. Our pasturage is insufficient for our herd.

Concerning the explanations, made by Dr. Mabon, regarding the requests contained in his report, I would respectfully add the following comments:

No. 1. HOSPITAL FOR ACUTE CASES.

The force of Dr. Mabon's remarks, as applied to the necessity for this hospital for the treatment of acute cases, is so obvious as to require very little that I can say to emphasize it. While some of our wards are fairly well adapted for handling the acute insane, under conditions of overcrowding, the care to be given to these cases is necessarily very greatly handicapped, and considering that among the acute cases, both those who are insane, and those who are sick as well as insane, I would state that no adequate provision at present exists for caring for these patients to the best advantage, particularly in the case of the latter.

Heretofore, with the exception of such patients as were given treatment in the branch and at the male infirmary, where almost exclusively the decrepit, feeble and filthy patients had to be cared for, no system has been in vogue latterly of treating the acute sick taken from among the patients in general in any regular hospital ward. These cases have been cared for wherever they have become sick, and certain classes of the acute insane that it would be more desirable to place with the acute sick, have also had to be cared for among other patients with whom it was a disadvantage to place them. An attempt has been made during the past year to separate these patients as far as possible, and ward 7 on the north wing has been set apart for the men, and ward 7 on the south wing for the women, our idea being to collect all the acute sick and such cases of the acute insane as require hospital diet and treatment, and care for them in these wards, not only collecting patients from the main building that need this treatment, but also from all the other buildings, separating out, however, the consumptives, who we consider it desirable to care for entirely apart from the other sick. The carrying out of this plan, particularly in cold or inclement weather, will necessitate our being provided with an ambulance, and it is to be hoped that the commission will allow a wagon properly equipped for this purpose. If the temporary arrangement referred to is carried out, it will be possible, with but little addition to our paid force, to give all of the acute sick a maximum amount of care both by day and by night. With the addition of a building designed particularly with reference to caring for the acute sick, the conditions would be vastly improved.

To understand the needs of the Willard State hospital, it may be necessary, in a brief way, to give a little explanation as to the class of cases that have heretofore been cared for in this institution, and to say something of the character of the patients as they now are. When this institution was formally opened, and until October 1, 1890, the patients sent to the hospital were chiefly those who were regarded as chronic cases, and it was considered

that with this class of patients it was desirable to care for them at the lowest possible cost. While not advocating any unnecessary luxuries, or extravagant surroundings, for this class, the general opinion as to the kind of care which they require, based principally on the humanitarian view of the matter, has materially changed, and considering the barren wards of the past which, in some public institutions, were destitute of even almost ordinary necessities for comfort, and considering that these patients, hopeless as their cases may be, are the immediate relatives and friends of so large a body of the citizens and taxpayers of the State, it is, in my opinion, a matter that we should be grateful for that this change has come about, and, applying my remarks particularly to the Willard State hospital, it is to be hoped that, for the kind of care necessary to be given to our present charges, this hospital will become as fully equipped and as well adapted for the work, as any of the others, and that no discrimination will be made against the institution because of its being so much further removed from the large centers. While the possession of a large and very productive farming property, and our location in the center of one of the largest agricultural districts of the State, renders it possible to make large savings in the ordinary expenses of the institution, both through the returns from the farm, and by our being able to buy many of our supplies at lower prices than some of the other hospitals—in the matter of the equipment and furnishing for corresponding classes of cases, and in the matter of the care given to patients suffering from insanity in accordance with their condition, I would respectfully submit that these should be as nearly as possibly uniform, and that it is only right that this hospital should have as much consideration in these matters as any of the others in the State.

NO. 2. COTTAGE FOR WORKING PATIENTS.

This matter I consider is sufficiently set forth in the notes of last year. Nothing has been done as regards building this structure, and it is quite desirable that this should be undertaken as soon as the funds can be obtained.

No. 3. COLD STORAGE PLANT.

A building of this character for cold storage and the manufacture of ice would be of great importance to the hospital, enabling us, as it would, to buy some of our supplies, notably butter, in much larger quantities and effect a saving to the hospital by getting these supplies at a time of year when they are sold at the lowest prices in the market. The possible manufacture of ice for hospital use is not least among the advantages that would be afforded by a plant of this kind to the institution. As Seneca Lake does not freeze over, we find it necessary to get all of our ice from the middle and east reservoirs belonging to the hospital. If the water for the east buildings is pumped largely from the middle reservoir, this will probably prevent our getting sufficient ice there to form any source of supply, and as the water from the east reservoir is considered unfit to use when frozen, except for the purpose of cooling meat and for such uses, it will be necessary for us to look in some other direction for ice for drinking water and other hospital requirements. A plant of the kind referred to could be arranged to do all the cooling necessary to keep the stores, and also to manufacture all the ice that would ordinarily be required in the institution, and this latter would have the advantage of being entirely pure. It is my opinion that a building of this kind would pay for itself in a few years in the saving that it would make.

No. 4. HEATING APPARATUS.

I desire to supplement Dr. Mabon's comments on the heating and ventilation of the main building, by stating that opinions that I have obtained from steam engineers who have looked over this plant are to the effect that portions of the work can only be used for a short time longer. The main steam pipe in the center has been clamped a number of times and is practically worn out; it will be absolutely necessary to have this replaced. The temperatures on some of the wards are low in cold weather, and additional heating surface is absolutely necessary to provide a

comfortable temperature, especially for the rooms off of the hallways. All of the radiators in the old indirect system of heating are of the old-fashioned kind, that clamp together with a rubber gasket between, and it is impossible to put any amount of pressure of steam upon them without forcing water through, and the consequence is that our basements are wet during all of the winter season. The conditions of heat and moisture in the closed basements, parts of which are always quite dark, are, as everyone is aware, a productive source of germ growth, and it does not seem possible that these basements can be made entirely sanitary or healthy until some of these defects are remedied. They will probably have to be under-drained and an asphalt bottom laid, and other means taken to render it proper to pass the body of air through them that is distributed to the wards for heating and ventilating. This would also probably necessitate fans at appropriate points and slight changes in the division of the passages; so that the pressure of a wind storm upon the western side of the building would not result in too unequal a division of the air distributed to the different wards. In many instances the radiators in the cellar are sent against a series of three flues, one leading to each one of the wards, the result being that, according to the conditions of pressure, etc., the heated air finds its way to the flue to which it has the easiest ingress, and this results in cold wards elsewhere. All of the windows in the main building are made on the plan often found in the older institutions or asylums for the insane, the upper sash consisting of an iron frame permanently fastened into the opening for the window, the glass being inserted into this frame so that, from the outside, it has the appearance of an ordinary window sash, but which, being immovable, entirely prevents top sash ventilation. To change all the windows of this building would be a matter of very great expense, but it is to be hoped that, in the work for the improving of the heating and ventilating, this matter may eventually receive some attention.

In connection with the remarks made above in relation to the steam heating, I would also draw attention to the fact that the method of heating is approximately the same throughout all buildings of the hospital. Radiators are almost entirely of the old clamp pattern, particularly where the indirect radiation prevails, and these are continually getting out of order and will not allow us to have a pressure of more than ten or fifteen pounds upon any of the radiators. As a result, we find by inspection of the temperature records, that the temperatures in cold weather are very low, the thermometer often ranging among the forties and fifties, in buildings where we have to care for a large number of people in feeble condition. An effort will be made this winter to improve these conditions by the use of weather strips, and should this prove unsatisfactory, we expect to make requisition upon the Commission for storm windows for some of these buildings, but much more radical measures must be eventually adopted to make the buildings entirely comfortable under all conditions. I would also draw attention to the fact that in some three or four of the outlying buildings, where these conditions prevail, and in some of which we have old and feeble people, it has been the practice of the hospital not to keep up the steam at night time, in winter. This custom renders the buildings very uncomfortable for both the patients and the employes who are on duty, and it hardly seems to me that it is very economical, at any rate as far as the expense of the coal is concerned; certainly not sufficiently so as to compensate for the amount of discomfort occasioned thereby, and I sincerely hope that, with the coming winter, we may be allowed sufficient help to have as uniform a supply of steam as possible throughout the twenty-four hours. The most difficult building to heat is the Branch, on account of its location on the top of the hill, where it is exposed to the full force of the western blasts. In this case it may be necessary to increase the heating surface, as well as to provide storm windows, to make the building comfortable in the very coldest weather.

No. 5. ELECTRIC LIGHT EQUIPMENT.

Although it would be extremely desirable to effect the change asked for in last year's report by having direct connected engines and dynamos installed, and provision made to connect together the different electrical units, so that, in case of a breakdown of any one of the dynamos we would not necessarily be without light, this matter is one of very considerable expense, particularly as we have practically outgrown the capacity of the present machines, and, as it would be necessary, especially if in the ventilation of the buildings, etc., we used motors to run the fans, and in other ways supply additional motive power that could be thus distributed from the electric plant, it would be necessary in making the changes referred to, to put in considerably larger machines than we have heretofore used. It would, therefore, seem to me that this question, in connection with the matter of adequate and proper heating of the buildings of the hospital, must necessarily be taken up on some general plan, and, from information that I have gained, I am of the opinion that eventually a move could be made at this hospital to have the heat for all the buildings supplied from one, or, at the most, two plants, instead of seven or more, as at present. If this should be eventually carried out, it would seem as if the economy would be enormous, particularly in the matter of the wages saved by being able to employ a much smaller number of employes to do the same amount of work as at present, and I think it would be more economical and desirable to make any changes that are made in the electric light plant at the same time that any possible changes in the combined heating, etc., are taken up and I would therefore recommend that this matter be dropped from consideration for the present time, unless the State Commission in Lunacy will signify their willingness, on the ground of the resulting economy, to take up the full consideration of both these questions. Aside from the standpoint of economy, I wish to state concerning the necessity of increasing the efficiency of the electric light plant in order not only to give a maximum efficiency

but also because of the greater safety to the patients in having a uniform and sufficient amount of light provided at all places where it is required, that the loss of light by the stoppage of the machines, or for any other reason, is an extremely material one in any institution for the insane, as it has been found that lack of sufficient light, or the going out of the light, because of the plant not having a reserve unit in case of breakdown, is a reason for great apprehension in an institution of this kind, because of the opportunity afforded patients with suicidal inclinations to take advantage of circumstances of this sort in attempting suicide, etc.

No. 6. PLUMBING.

Too much can not be said as to the necessity of continuing the work of replumbing all of the buildings that have not been considered up to this time. Supposing that the Commission will allow us sufficient funds for the main building, as a matter that is absolutely imperative, I would recommend that the request for money asked for be continued, and that the work of replumbing all the detached buildings be progressed with until this has been satisfactorily concluded. This would include not only the provisions for water-closets, wash-basins, sinks, etc., but also the matter of supplying proper bathing facilities, as heretofore outlined in my report.

No. 7. PIAZZAS.

Should it be possible for us to procure a sum of money to proceed with this work, it would seem to be very desirable. We have understood the necessity of being as moderate as possible in all of our requests, because of the many needs of the State hospital service, particularly because of the overcrowding from which all of the hospitals, as well as Willard, have probably suffered. This would be one of the matters that I would suggest should be placed before the Commission as desirable, but which could be waited for until some of the more important matters have been attended to.

No. 8. NEW FLOORS.

The floors in many places are badly worn, and were it not for our system of polishing, which has taken the place of the former washing, and which it is necessary to give them in order to keep the floors in anything like presentable condition, it would be impossible to use many of the floors throughout the hospital. In numerous places there are cracks an eighth of an inch wide between the boards, and the planks in the worst places are so worn out that patching is useless. In the temporary repairs that we undertook in the buildings referred to in Dr. Mabon's notes of last year, we found that the ends of the timbers in many places were rotten and were gradually dropping into the basement. These have been temporarily supported in the places where they were the worst, but something radical in the way of repairs is imperative.

No. 9. SIDEWALKS.

As stated in the former portion of our report, the Commission have made us an allowance to prosecute the work of laying sidewalks during the past season, and a portion of this work is still in hand. It will be necessary, however, to continue this somewhat, and it is very desirable that an allowance should be made this season in order to enable us to proceed with this work.

No. 10. STEEL FENCE.

The comments on this matter by the Superintendent in last year's report were none too strong, and there is scarcely anything about the institution that is more needed than a fence along the front of the property. Throughout the season we were troubled and annoyed very greatly by visitors crossing the premises and attempting to go wherever they pleased, refusing, in many cases, to submit with any degree of readiness to the supervision that we found necessary to put upon their sightseeing and curiosity. In fact, a large proportion of the excursionists and others with whom we had trouble seemed to regard the hos-

pital as merely a public park, created entirely for the purpose of their own enjoyment, and not for the insane, and they would insist on going anywhere and everywhere, coming in contact with the patients, and giving them things without our consent, peering into the windows, and subjecting the patients to their display of morbid curiosity, etc. With grounds as extensive as ours, it is possible that another watchman or two, in the summer season, would also be necessary to stop this, but the necessity, it would seem to me, is the more apparent from the fact that we had cases in which visitors gave knives, and, we believe, matches to out patients, etc., and that many outsiders would insist on coming within the grounds and attempting to do business with and otherwise interfering with our employes in the performance of their duties. These matters have always been contrary to the rules of the hospital, and are noted among the regulations of the oldest rule books that I have been able to find, but it has been, and will be, extremely hard to prevent a great deal of the annoyance unless we have a proper fence to keep outsiders from coming within the grounds, except when they have proper permission and a reasonable object in doing so. We find that a steel fence eight feet high would cost somewhat more at the present time than the amount specified in last year's report, but I think we could have a fence of this height, and erect as much of it as would be needed to reach from the lake to the wooden fence that is now in place at a much less cost than the amount previously named, and replace the latter with a steel fence of the same style as the new one, later on, as needed. This would at least give us protection for the time being, and if this was afforded, we could well wait for some time for the additional amount required. The cost of this fence would be about \$1.65 per foot, and \$3,000 would cover the cost of so much of it as would be needed to fence the distance mentioned.

No. 11. STEEL CEILINGS.

One of the greatest improvements that has been made at this hospital has been the substitution of steel ceilings for the old

plaster ceilings. The latter were continually coming down, as they had been in place for many years. At present we have got the ceilings into fair condition, but it is desirable that this matter should be progressed with as soon as it is possible for us to obtain the additional amount of money required.

No. 12. FURNITURE.

As outlined in the previous report, quite a little remains to be done in the matter of furnishing the wards of the hospital. We are fairly comfortable at present, and considering the necessity for money in other directions, I would recommend that this amount be reduced to a request for \$2,500 for the coming year. This, together with the money that could reasonably be allowed us by the Commission for ordinary repairs, would place the hospital in a comfortable position.

No. 13. PAINTING.

This amount is very greatly needed, and considerably more could be utilized to good advantage in improving the hospital buildings. In my experience it is better to have a thing well done in all cases, and nothing adds as much to the attractiveness of a hospital as to have the wards neatly painted; and the vast change in the institutions for the insane in the last twenty years that has resulted in the so-called "mad-houses" being changed into hospitals that are comparatively quiet and admittedly so much superior, has, in my opinion, been chiefly due to the endeavor that has been made to give them, as nearly as possible, the attractiveness of "home" surroundings. There is less destruction, less violence among the patients, fewer complaints and abuses, and I believe a considerably increased proportion of recoveries. And considering that the patients in our charge are, in a large number of the cases, the relatives and friends of the citizens and taxpayers throughout the respective hospital districts, it is my belief that the institutions are pursuing a work and carrying out a practical charity that is of great importance

to all residents of the State. In spite of all that has been said in favor of the diminution of the expense of the care of the insane, etc., all the results now show that where this has been carried too far, it has been attended by a reduced standard of care, including allegations of brutality and all the ills that we have grown to expect where a too low per capita cost is adhered to. I do not advocate at all the giving of unnecessary luxuries to people who have never been accustomed to them, or in any way unnecessarily increasing the expense of maintenance, but I believe that it is, and should be generally recognized that every advantage should be given in the way of advancing the curative treatment and alleviating suffering, and that possibly some of the comments that have been made upon our giving a liberal treatment to our unfortunate charges, have been because the fact has been lost sight of, that in a hospital for the insane, the treatment in general matters must be to a large extent general, and too marked exceptions or difference in surroundings among a large number of patients cannot be made without resulting in harm to the patients. In my opinion, all progressive institutions will regulate consistently the care and treatment of their patients in these matters according to the necessities of their cases, and I believe that the experience of New York State has shown the wisdom of the State's course.

NO. 14. MACHINE SHOP AND EQUIPMENT.

The allowance made by the State Commission in Lunacy for a motor for running the machinery used in the machine shop, cementing the floor, and in other ways preparing this building, will now render all of this equipment unnecessary, at this time. A few pieces of machinery, such as we might require for special needs, could probably be purchased by money allowed us by the Commission for the particular purposes for which they might be required, and I would therefore recommend that this item be dropped from the budget for this year.

No. 15. TILING.

In all of our detached buildings the conditions of overcrowding are most apparent in our dining rooms. The floors being of wood, the ceilings low, and the rooms themselves not very well ventilated, result in our inability to keep the dining rooms in a good condition as could be wished. Overcrowding in dining rooms is seldom more marked than it has been in those at the Willard State Hospital. To obviate this difficulty, a number of the tables were placed upon the side halls, and with this arrangement we have been able to get along much better, although it has had some disadvantage in attracting flies into the corridors and wards in the summer time. A great improvement certainly could be made in the cleanliness and neatness of these dining rooms, could this tiling be allowed, although it is very necessary, in connection with this, to increase the size of the dining rooms themselves, so as to accommodate all of the patients in them, and also to provide them with appropriate pantries for the washing and storing of dishes, food supplies, etc.

No. 16. PATHOLOGICAL LABORATORY.

This hospital is entirely without any proper laboratory suited to carrying on the scientific work and research necessary to keep it abreast of the times in this direction. As we must admit that, primarily, our efforts are directed towards the curative treatment of insanity, as well as the more humane treatment of the insane, it would seem to me necessary that as close a pursuance of this work as possible should be kept up, and I would therefore recommend that the amount of this request be increased to \$2,500.

No. 17. FARM IMPLEMENTS AND TILE.

In completing the draining of our rough and wet land and in continuing the work of our farm, which has always been admitted to be extremely remunerative for an institution such as ours, I believe that it is necessary that the amount asked for should be allowed.

No 18. FARM FENCES.

The same remarks apply to this item.

No. 19. SILO.

The pasture for the cattle at this hospital amounted to so little during the past season, owing to the drought, that they had to be fed during almost the entire time. We are using all of our available land, and could use more if we had it, and the erection of a proper silo would enable us to utilize some of our land to very much better advantage.

In addition to the above named items, I would respectfully draw your attention to the necessity of having a suitable road-making machine procured for this institution, particularly on account of the extent of the grounds and the roads running through them. A machine of this kind would probably cost \$3,500.

Two or three of the other hospitals have been given road machines, but we have been unable, because of their constant use at those institutions, to borrow one of them for a few months, or even weeks, and it would seem that, if an arrangement could be made with the Lunacy Commission, an additional machine might be purchased to very great advantage, to be used between this institution and one of the others, say the Rochester State Hospital.

There is also a very great necessity for our having a somewhat more modern way of handling the milk from our cows. On previous occasions we have had outbreaks of tuberculosis among our cattle, and, considering the results at Ogdensburg and some of the other hospitals, where the cattle have been found to be infected, and have had to be destroyed, it seems to me a very important thing that we should at least carefully handle our milk supply and Pasteurize it.

To do this, a milkroom and Pasteurizing apparatus would be necessary, at a probable cost of \$1,800.

COMPARATIVE STATEMENT OF REQUESTS FOR APPORTIONMENTS.

	Amounts asked for in 1896.	Amounts asked for in 1897.
Increased water supply.....	\$20,000	\$25,000
Two bath houses.....	25,000	25,000
Hospital for acute cases.....	25,000	25,000
Cottage for working patients.....	16,500	16,500
Cold storage	14,500	14,500
Heating apparatus	20,000	20,000
Electric light equipment.....	16,000	.....
Plumbing	15,000	15,000
Piazas	5,000	5,000
New floors	6,500	6,500
Sidewalks	1,500	1,500
Steel fence	7,500	3,000
Steel ceilings	3,000	3,000
Furniture	5,000	2,500
Painting	3,000	3,000
Machine shop and equipment.....	4,000	.....
Tiling	5,000	5,000
Pathological laboratory	800	2,500
Farm implements and tile.....	750	750
Farm fences	1,200	1,200
Silo	3,500	3,500
Road machine .....	.....	3,500
Milkroom and Pasteurizing apparatus..	.....	1,500
Totals	\$198,750	\$183,450

MEDICAL STAFF AND OFFICERS.

During the year of 1896, Dr. Carlos F. MacDonald, the president of the State Commission in Lunacy, retired from that position, and Dr. P. M. Wise, then Superintendent of the State Hospital at Ogdensburg, being appointed to that position, Dr. Will-

iam Mabon, my predecessor as Medical Superintendent of this hospital, was appointed to the latter position. This caused a vacancy for Superintendent at the Willard State Hospital, to which I was appointed in November, 1896, at which time I was Medical Superintendent of the Male Department of the Manhattan State Hospital, at Ward's Island, New York city.

Between the time of Dr. Mabon's going to Ogdensburg and my arrival at the hospital, the institution was managed under the direction of Dr. Henry P. Frost, the First Assistant Physician, as Acting Superintendent.

My duties at Willard were taken up January 13, 1897. The present report, therefore, includes statistics and data for the fiscal year, both prior to my assuming the duties of Superintendent at this institution, and for the period embraced from January 13 to September 30, 1897.

The changes in the personnel of the Medical Staff during the year in which I have been superintendent of the Willard State Hospital were as follows: Dr. Henry P. Frost, first assistant physician, was transferred, on March 1st, to the Buffalo State Hospital, to fill a like position at that institution, the vacancy having been caused by the transfer and promotion of Dr. Percy Bryant to the position of Medical Superintendent of the Male Department of the Manhattan State Hospital. The vacancy thus caused at this institution was filled by the appointment of Dr. William L. Russell, of Bay Shore, L. I., as First Assistant Physician on March 15th. Dr. John W. Russell, formerly Medical Interne, was promoted to the position of Junior Physician on November 13, 1896. This was a new position added to the staff. Dr. Godfrey Pittis and Dr. Edwin G. Klein were appointed Medical Internes on March 25, 1897. These were the only changes that occurred during the year.

In this connection, I wish to record my gratitude to the officers of the institution for the ready assistance that I have found on all occasions since I filled the position of superintendent. The occurrence of epidemic disease and the worry and anxiety conse-

quent upon this, particularly from the fact of the disease breaking out in my own family, have been instrumental in establishing somewhat closer relations than possibly would otherwise have been the case. I am also very much indebted to Mr. M. J. Gilbert, steward of the hospital.

EMPLOYES.

The service of the hospital during the past year has been uniformly good. It is with pleasure that I record the general good conduct and zeal of the employes, and their faithful performance of the duties assigned to them individually. Comparatively few changes have occurred among our corps of employes.

Jane McClelland, attendant, appointed on April 23, 1895, died of heart disease on February 18, 1897, and Gilbert T. Sears, nurse, appointed as an attendant September 8, 1890, died on September 30, 1897, also of heart disease. Both of these employes had been in the continuous employment of the institution during the time specified.

ACKNOWLEDGMENTS.

The religious services and visitations to the sick have been maintained during the year as usual, and our thanks for this work and assistance are due to Rev. H. A. Porter, Rev. C. W. MacNish, Rev. J. H. Rogers, Rev. T. J. O'Connell, Rev. J. A. Kennedy and Rev. M. Curran, all of Ovid, N. Y.

Reading matter has been contributed as follows:

American Baptist Flag, St. Louis, Mo., 1 copy.

Attica News, Attica, N. Y., 1 copy.

Auburn Deutsch Zeitung, Auburn, N. Y., 2 copies.

Auburn Weekly Bulletin, Auburn, N. Y., 1 copy.

Allegany County Democrat, Wellsville, N. Y., 2 copies.

Albion Free Lance, Albion, N. Y., 1 copy.

Addison Advertiser, Addison, N. Y., 2 copies.

Addison Record, Addison, N. Y., 1 copy.

Batavia Daily News, Batavia, N. Y., 1 copy.

Batavian, Batavia, N. Y., 1 copy.
Cayuga Chief, Weedsport, N. Y., 1 copy.
Cohocton Times, Cohocton, N. Y., 1 copy.
Caledonia Advertiser, Caledonia, N. Y., 1 copy.
Catholic Journal, Rochester, N. Y., 1 copy.
Catholic Review, New York city, 1 copy.
Cayuga County Independent, Auburn, N. Y., 1 copy.
Cuba Patriot, Cuba, N. Y., 1 copy.
Clyde Times, Clyde, N. Y., 1 copy.
Deaf-Mutes Journal, New York city, 1 copy.
Dansville Advertiser, Dansville, N. Y., 1 copy.
Democratic Herald, Clyde, N. Y., 1 copy.
Dryden Herald, Dryden, N. Y., 1 copy.
Farmer Review, Farmer, N. Y., 1 copy.
Geneva Advertiser, Geneva, N. Y., 1 copy.
Geneva Gazette, Geneva, N. Y., 1 copy.
Geneva Courier, Geneva, N. Y., 1 copy.
Groton and Lansing Journal, Groton, N. Y., 1 copy.
Holley Standard, Holley, N. Y., 1 copy.
Hammondsport Herald, Hammondsport, N. Y., 1 copy.
Hornellsville Times, Hornellsville, N. Y., 1 copy.
Hornellsville Weekly Tribune, Hornellsville, N. Y., 1 copy.
Ithaca Daily News, Ithaca, N. Y., 3 copies.
Ithaca Democrat, Ithaca, N. Y., 1 copy.
Lake Shore News, Wolcott, N. Y., 1 copy.
Le Roy Gazette, Le Roy, N. Y., 1 copy.
Livonia Gazette, Livonia, N. Y., 1 copy.
Montour Falls Free Press, Montour Falls, N. Y., 1 copy.
Mt. Morris Enterprise, Mt. Morris, N. Y., 1 copy.
Naples Record, Naples, N. Y., 1 copy.
Orleans American, Albion, N. Y., 1 copy.
Oakfield Reporter, Oakfield, N. Y., 1 copy.
Ovid Gazette, Ovid, N. Y., 2 copies.
Ovid Independent, Ovid, N. Y., 2 copies.
Ontario County Times, Canandaigua, N. Y., 1 copy.

Ontario County Journal, Canandaigua, N. Y., 4 copies.
Perry Herald and News, Perry, N. Y., 2 copies.
Penn Yan Express, Penn Yan, N. Y., 1 copy.
Penn Yan Democrat, Penn Yan, N. Y., 1 copy.
Rochester Morning Herald, Rochester, N. Y., 1 copy.
Seattle Post Intelligence, Seattle, Washington, 1 copy.
Seneca County Courier, Seneca Falls, N. Y., 1 copy.
Seneca County Journal, Seneca Falls, N. Y., 1 copy.
Seneca County News, Waterloo, N. Y., 1 copy.
Seneca County News Letter, Geneva, N. Y., 1 copy.
Seneca Falls Reveille, Seneca Falls, N. Y., 3 copies.
Southern Steuben Republican, Woodhull, N. Y., 1 copy.
Spirit of the Times, Batavia, N. Y., 1 copy.
Steuben Courier, Bath, N. Y., 1 copy.
Steuben Farmers' Advocate, Bath, N. Y., 1 copy.
Union Springs Advertiser, Union Springs, N. Y., 1 copy.
Victor Herald, Victor, N. Y., 1 copy.
Waterloo Observer, Waterloo, N. Y., 1 copy.
Watkins Express, Watkins, N. Y., 1 copy.
Yates County Chronicle, Penn Yan, N. Y., 2 copies.

OFFICIAL VISITS.

The members of the State Commission in Lunacy have made the usual number of official visits to the hospital during the year.

Senators B. M. Wilcox, E. C. Stewart, B. F. Martin and S. H. Humphrey, and Assemblyman S. F. Nixon, were among the distinguished visitors who were at the hospital during the year.

In conclusion, allow me to express to your Board my personal gratitude for your interest and sympathy during the past year.

Very respectfully,

WM. AUSTIN MACY,

Medical Superintendent.

REPORT OF THE TREASURER

To the Managers of the Willard State Hospital:

The treasurer of the Willard State Hospital respectfully submits the following statement of his receipts and payments for the year ending September 30, 1897:

Receipts.

Balance on hand, September 30, 1896.....	\$3,928 59
From State Comptroller, general fund.....	342,888 89
From State Comptroller, special funds.....	50,090 79
From State Comptroller, employment of clergymen.	1,000 00
From private patients.....	1,293 45
From reimbursing patients.....	16,346 21
From M. J. Gilbert, steward, for sales of attendants' uniforms	267 14
From M. J. Gilbert, steward, for sales of old material	1,435 45
From M. J. Gilbert, steward, for sales of farm and grounds	283 75
From M. J. Gilbert, steward, for cash refunded.....	24 52
From M. J. Gilbert, steward, for sales of telephone tickets	56 00
From M. J. Gilbert, steward, for sales of text-books.	69 00
From M. J. Gilbert, steward, for rents.....	253 50
From various State hospitals, manufacturing account	97 00
From interest on deposits	217 16
Total	<u>\$418,251 45</u>

Payments.

Vouchers paid from general fund.....	\$364,503 06
Vouchers paid from special funds.....	50,090 79
Vouchers paid from employment of clergymen fund.	1,000 00

Vouchers paid from manufacturing account fund..	\$35 00
Balance on hand September 30, 1897.....	2,622 60
Total	<u>\$418,251 45</u>

Balances.

General fund	\$2,560 60
Manufacturing account	62 00
Total	<u>\$2,622 60</u>

J. B. THOMAS,
Treasurer.

REPORT OF THE STEWARD

To the Medical Superintendent:

The following report of the farm and garden products, stock on hand, articles manufactured, and the classification and summary of expenditures for maintenance, for the year ending September 30, 1897, is respectfully submitted:

FARM PRODUCTS.

Apples, barrels, estimated.....	300
Buckwheat, bushels	200
Beef, dressed, pounds.....	10,566
Corn, ears, bushels, estimated.....	2,500
Cornstalks, tons, estimated.....	50
Corn fodder, tons, estimated.....	150
Chickens, dressed, pounds.....	1,848
Eggs, dozens	1,537
Geese, pounds	10
Grapes, pounds	4,072
Hay, tons	280

Hides, pounds	1,966
Mangel-wurzel, bushels, estimated	10,000
Milk, gallons	108,345
Oats, bushels, estimated	3,600
Straw, tons, estimated	120
Potatoes, bushels, estimated	7,000
Pears, bushels	47
Plums, bushels	27
Peaches, bushels	69
Pork, pounds	38,937
Turkeys, dressed, pounds	285
Veal, pounds	116
Wheat, bushels, estimated	3,000

GARDEN PRODUCTS.

Beets, bushels, estimated	2,368
Beans, string, bushels	215
Beans, Lima, bushels, estimated	35
Cabbage, heads	23,687
Celery, heads	8,000
Carrots, bushels, estimated	300
Corn, sweet, bushels	1,182
Cucumbers, bushels	111
Eggplant, bushels	6
Lettuce, bushels	1,179
Majoram, bunches	80
Onions, bushels	540
Onions, bunches	7,730
Peas, bushels	137
Parsnips, bushels, estimated	300
Peppers, bushels, estimated	20
Potatoes, bushels	282
Radishes, bunches	3,900
Rhubarb, bunches	12,881
Rutabagas, bushels, estimated	1,200

Salsify, bushels, estimated.....	30
Swiss chard, bushels	1,110
Spinach, bushels	370
Squash, hubbard, bushels, estimated	40
Savory, bunches	275
Tomatoes, bushels, estimated	1,933
Turnips, bushels, estimated	391
Thyme, bunches	200
Wormwood, bunches	90

FARM STOCK.

Horses, good	31
Horses, old	5
Mules	2
Cows	137
Bulls	3
Heifers, one-year old	18
Heifers, two-year old	16
Calves	22
Boars	4
Hogs	126
Sows, for breeding	50
Shotes	121
Pigs	100
Geese	40
Ducks	45
Turkeys	75
Fowls	468

ARTICLES MADE IN MATRON'S DEPARTMENT.

Aprons, men's	684
Aprons, patients'	4,243
Balmoral skirts	49

Bed protectors	34
Bed sacks	25
Bureau covers	143
Blankets, hemmed	288
Bedspreads, hemmed	89
Blankets, quilted	78
Caps for men	108
Caps for attendants	824
Curtains	1,280
Chemises	2,488
Dresses	4,543
Dresses, quilted	67
Drawers, pairs	2,002
Hats, trimmed	321
Hash covers	6
Mattress ticks	328
Napkins, hemmed	180
Night gowns	286
Pillow cases	4,665
Pillow ticks	46
Ruffles, hemmed	1,117
Shirt-waists	26
Shrouds	156
Shroud shirts	108
Sheets	4,166
Sheets, canvas, quilted	45
Shirts	4,609
Skirts	1,322
Stretchers	4
Towels, hemmed	10,445
Table cloths	1,712
Table spreads, hemmed	28
Underwaists	4
Wrappers	401

GARMENTS MADE IN TAILORING DEPARTMENT.

Coats.	1,741
Vests.	1,590
Pants.	2,338
Overcoats.	155
Overalls.	443
Overshirts.	174
Wrappers.	4
Drawers.	4
Suspenders.	14
Straight suits	84

ARTICLES MADE IN SHOESHOP.

Hair mattresses	80
Hair mattresses, remade.	402
Hair pillows, new.	25
Hair pillows, remade.	554
Chairs, upholstered	10
Chair cushions, new.	9
Cushions for boat, recovered.	2
Couches, upholstered	8
Robes, lined	16
Clothes bags	42
Double team reins, pairs.	3
Hame straps	28
Harness straps	57
Horse halters, pairs	2
Martingales, pairs	2
Carriage trimmed	1
Surrey trimmed	1
Pennsylvania wagons, covered.	3
Straps for electric engines.	5
Shoes, men's working, pairs.	127
Shoes, women's, pairs	1

And all repair of harness, boots, shoes and slippers.

MAINTENANCE—PER CAPITA COST PER WEEK.

	Total cost.	Per capita.
Officers' salaries	\$20,656 25	\$0.1759
Wages	136,441 72	1.1620
Provisions and stores	115,699 92	.9853
Ordinary repairs	5,499 70	.0468
Farm and grounds	6,649 60	.0566
Clothing.	24,236 54	.2064
Furniture and bedding	11,326 87	.0964
Books and stationery	2,421 45	.0206
Fuel and lights	26,902 68	.2206
Medical supplies	2,763 12	.0235
Miscellaneous expenses	8,158 34	.0694
Transportation of patients	3,746 87	.0319
Total	<u>\$364,503 06</u>	<u>\$3.0954</u>

STATISTICAL TABLES

TABLE No. 1.

Showing Movement of Population for the Year Ending September 30, 1897.

	Men.	Women.	Total.
Remaining October 1, 1896	1,094	1,154	2,248
Admitted during year ending September 30, 1897:			
On original commitments:			
From residences	140	122	262
By transfers from county houses.....	17	8	25
By transfers from other institutions for insane.	15	31	46
Total number under treatment during year..	1,266	1,315	2,581
Daily average population	1,106	1,152	2,258
Capacity of institution	1,104	1,166	2,270
Discharged during the year :			
As recovered	39	24	63
As improved.....	35	32	67
As unimproved.....	13	15	28
As not insane.....	2	.....	2
Died	71	91	162
Whole number discharged during the year .	160	162	322
Remaining October 1, 1897.	1,106	1,153	2,259

TABLE No. 2.

October 1, 1896, to September 30, 1897.

Date of opening ,	1869
Total acreage of grounds and buildings	1,107
Value of real estate, including buildings	\$1,466,205 34
Value of personal property	224,808 56
Acreage under cultivation	750
Receipts during year:	
Balance on hand September 30, 1896	\$3,928 59
From State Treasurer for maintenance on estimates	
1 to 12 inclusive	342,888 89
From private patients	1,293 45
From reimbursing patients	16,346 21
From all other sources	2,606 52
Total receipts for maintenance	<u>\$367,063 66</u>
Total receipts for employment clergymen	\$1,000 00
Total receipts from State Commission in Lunacy	
for extraordinary improvements	50,090 79
Total receipts manufacturing accounts	<u>97 00</u>
Disbursements during year for maintenance:	
Estimate No. 1. For officers' salaries	\$20,656 25
Estimate No. 2. For wages	136,441 72
Estimate No. 3. For provisions and stores	115,699 92
Estimate No. 4. For ordinary repairs	5,499 70
Estimate No. 5. For farm and grounds	6,649 60
Estimate No. 6. For clothing	24,236 54
Estimate No. 7. For furniture and bedding	11,326 87
Estimate No. 8. For books and stationery	2,421 45
Estimate No. 9. For fuel and light	26,902 68
Estimate No. 10. For medical supplies	2,763 12
Estimate No. 11. For miscellaneous expenses	8,158 34
Estimate No. 12. For transportation	3,746 87
Total disbursements, estimates 1 to 12 inclusive	<u>\$364,503 06</u>

Table No. 2—(Concluded).

Total disbursements, employment clergy... ..	\$1,000 00
Total disbursements during year for extraordinary improvements under apportionments by State Commission in Lunacy.....	50,090 79
Total disbursements, manufacturing department...	35 00
<hr/> <hr/>	
Balances October 1, 1897:	
General maintenance fund.....	\$2,560 60
Apportionment by State Commission in Lunacy for extraordinary improvements.....	
Manufacturing account.....	62 00
Weekly per capita cost on daily average number of patients, estimates 1 to 12 inclusive	3.1043
<hr/> <hr/>	
Maximum rate of wages paid attendants:	
Men.....	\$33 00
Women.....	28 00
Minimum rate of wages paid attendants:	
Men.....	20 00
Women.....	14 00
Proportion of day attendants to average daily population	1 to 11.06
Proportion of night attendants to average daily population.....	1 to 72.83
Percentage of daily patient population engaged in some kind of useful occupation.....	46.70
Estimated value of farm and garden products during year.....	41,192 75
Estimated value of articles made or manufactured by patients during year.....	25,152 37
<hr/> <hr/>	

TABLE No. 3.

Showing the Assigned Causes of Insanity in Cases Admitted During the Current Year.

CAUSES.	YEAR ENDING SEPTEMBER 30, 1897.			INHERITED PREDIS- POSITION.			Unascertained.
	Men	Women.	Total.	Men.	Women.	Total.	
Moral :							
Adverse conditions (such as loss of friends, business troubles, etc.).....	22	29	51	13	5	18	7
Mental strain, worry and overwork (not included in above)..	8	12	20	4	2	6	....
Religious excitement.	7	1	8	2	1	3	1
Love affairs (includ- ing seduction).....	1	3	4	1	2	3	1
Fright and nervous shock.....	....	1	1	....	....	....	....
Physical :							
Intemperance.....	30	5	35	5	3	8	6
Sexual excess.....	4	....	4	....	....	....	1
Venereal diseases	7	1	8	2	....	2	1
Masturbation.....	9	1	10	3	....	3	....
Sunstroke.....	5	2	7	2	1	3	....
Accident or injury ...	8	....	8	5	....	5	1
Parturition and puer- perium.....	....	7	7	....	1	1	....
Lactation.....	....	1	1	....	1	1	....
Change of life.....	....	12	12	....	3	3	....
Privation and over- work.....	....	1	1	....	....	....	....
Epilepsy.....	6	5	11	....	1	1	5
Diseases of skull and brain.....	6	....	6	3	....	3	1
Old age.....	13	6	19	....	1	1	4
Epidemic influenza ...	1	6	7	1	2	3	....
Abuse of drugs.....	2	3	5	1	....	1	....
All other bodily dis- orders and ill health	12	19	31	4	8	12	2
Heredity.....	18	23	41	18	23	41	....
Congenital defect.....	3	3	6	....	2	2	2
Unascertained.....	7	20	27	....	1	1	10
Not insane.....	3	....	3	....	....	....	....
Total.....	172	161	333	64	57	121	42

TABLE No. 4.

Showing Forms of Insanity in Those Admitted, Recovered and Died During the Year Ending September 30, 1897, and Since October 1, 1888.

FORM.	YEAR ENDING SEPTEMBER 30, 1897.			SINCE OCTOBER 1, 1888.		
	Admitted.	Recovered.	Died.	Admitted.	Recovered.	Died.
Mania, acute*	63	29	10	426	169	48
Mania, recurrent	4	.....	.....	58	20	10
Mania, chronic	41	.....	20	420	22	211
Melancholia, acute†	83	30	18	575	180	128
Melancholia, chronic	34	4	11	351	23	80
Alternating (circular) insanity	.....	.....	.....	2	.....	.....
General paralysis	7	.....	9	94	.....	84
Dementia, primary	.....	.....	.....	2	.....	.....
Dementia, terminal	82	.....	83	1,291	.....	708
Epilepsy with insanity	12	.....	11	160	.....	131
Imbecility with maniacal attacks	4	.....	.....	83	.....	13
Idiocy	.....	.....	.....	36	.....	15
Not insane‡	3	.....	.....	10	.....	.....
Total	333	63	162	3,508	414	1,428

* Includes 169 cases previously reported as "sub-acute mania." † Includes 140 cases previously reported as "sub-acute melancholia." ‡ Includes cases of alcoholism, drug habit, etc.

TABLE No. 5.

Showing Results of Treatment in Presumably Curable Cases for the Current Year.

CURABLE CONDITIONS.		PRESENT AT BEGINNING OF YEAR.			ADMITTED DURING YEAR.			UNDER TREATMENT DURING YEAR.		
		Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
Melancholia in acute forms..	{ First admission	19	11	30	28	13	41	47	24	71
	{ Second admission ..	.....	1	1	3	1	4	3	2	5
	{ Third admission....	.....	.....	.....	.....	2	2	.....	2	2
Mania in acute forms.....	{ First admission	10	12	22	21	15	36	31	27	58
	{ Second admission ..	5	1	6	1	1	2	6	2	8
	{ Third admission....	.....	.....	.....	.....	1	1	.....	1	1
All other curable forms	{ First admission	4	2	6	1	.....	1	5	2	7
	{ Second admission ..	.....	.....	.....	.....	.....	.....	.....	.....	.....
	{ Third admission....	.....	.....	.....	1	.....	1	1	.....	1

Table No. 5—(Continued).

CURABLE CONDITIONS.		LENGTH OF INTERVAL OF COMPLETE IMMUNITY FROM SYMPTOMS OF INSANITY IN CASES PREVIOUSLY DISCHARGED Recovered—Now Readmitted.																	
		UNDER 3 MONTHS.		FROM 3 MONTHS TO 1 YEAR.		FROM 1 TO 2 YEARS.		FROM 2 TO 3 YEARS.		FROM 3 TO 4 YEARS.		FROM 4 TO 5 YEARS.		BETWEEN 5 AND 10 YEARS.		AVERAGE LENGTH OF IMMUNITY.			
		Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	MEN.		WOMEN.	
																Years.	Months.	Years.	Months.
Melancholia in acute forms.	First admission.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Second admission.	.....	.....	1	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	8	1	9
	Third admission.	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	6	3	9
Mania in acute forms.	First admission.	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Second admission.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	6	.....
	Third admission.	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	9
All other curable forms.	First admission.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Second admission.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Third admission.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Table No. 5—(Concluded).

CURABLE CONDITIONS.		DISCHARGED RECOVERED DURING YEAR.			AVERAGE LENGTH OF TREATMENT OF RECOVERED CASES. (LAST ATTACK.)				DIED DURING YEAR.			TRANSFERRED TO OTHER GROUPS.			REMAINING AT CLOSE OF FISCAL YEAR.		
		Men.	Women.	Total.	MEN.		WOMEN.		Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
					Years.	Months.	Years.	Months.									
Melancholia in acute forms.	First admission...	16	9	25	....	9	1	2	1	1	2	4	....	4	26	14	40
	Second admission .	2	1	3	2	8	1	5	....	....	....	1	....	1	1	1	2
	Third admission ..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	2
Mania in acute forms.	First admission...	11	13	24	....	5	....	6	2	2	4	6	1	7	12	11	23
	Second admission.	4	1	5	1	1	....	9	....	....	....	....	....	....	2	1	3
	Third admission ..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1
All other curable forms.	First admission...	5	....	5	....	10	....	....	....	....	....	....	....	....	....	2	2
	Second admission..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Third admission ..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

TABLE No. 6.

Showing the Duration of Insanity Previous to Admission, and the Period Under Treatment of Patients Discharged Recovered During the Current Year and Since October 1, 1888.

	YEAR ENDING SEPTEMBER 30, 1897.						SINCE OCTOBER 1, 1888.					
	DURATION PREVIOUS TO ADMISSION.			PERIOD UNDER TREATMENT.			DURATION PREVIOUS TO ADMISSION.			PERIOD UNDER TREATMENT.		
	Men.	Women.	Total	Men.	Women.	Total.	Men.	Women.	Total	Men.	Women.	Total.
Under one month.....	14	9	23	.....	.....	.....	73	60	133	2	.....	2
One to three months.....	11	6	17	7	5	12	43	57	100	35	13	48
Three to six months.....	8	5	13	12	7	19	32	33	65	65	49	114
Six to nine months.....	1	2	3	8	3	11	12	11	23	37	39	76
Nine months to one year.....	.....	1	1	3	5	8	6	10	16	25	33	58
One year to eighteen months.	1	.....	1	4	2	6	9	4	13	29	31	60
Eighteen months to two years	1	1	2	3	.....	3	9	6	15	5	10	15
Two to three years.....	1	.....	1	2	1	3	7	8	15	8	18	26
Three to four years.....	1	.....	1	.....	1	1	3	2	5	2	6	8
Four to five years.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	1	4
Five to ten years.....	.....	.....	.....	.....	.....	.....	4	5	9	1	1	2
Ten to twenty years.....	.....	.....	.....	.....	.....	.....	1	2	3	.....	1	1
Unascertained.....	1	.....	1	.....	.....	.....	13	4	17	.....	.....	.....
Total.....	39	24	63	39	24	63	212	202	414	212	202	414

TABLE No. 7.

Showing the Causes of Death of Patients Who Died During the Current Year and Since October 1, 1888.

CAUSE OF DEATH.	YEAR ENDING SEPTEMBER 30, 1897.			SINCE OCTOBER 1 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Abscess of brain.....	.....	.....	.....	.....	1	1
Acute peptitis.....	.....	.....	.....	.....	1	1
Acute nephritis.....	.....	1	1	4	3	7
Acute pharyngitis.....	.....	.....	.....	.....	1	1
Acute tuberculosis.....	.....	.....	.....	.....	2	2
Aneurism, aortic.....	1	.....	1	1	.....	1
Asphyxia.....	.....	.....	.....	1	.....	1
Asphyxia from suspension (suicidal)...	.....	.....	.....	1	.....	1
Asphyxia from lodgment of food in pharynx.....	1	.....	1	4	.....	4
Asthenia, following fracture of femur..	.....	.....	.....	.....	1	1
Bronchitis, acute.....	.....	.....	.....	2	.....	2
Bronchitis, chronic.....	.....	.....	.....	2	.....	2
Bronchitis.....	.....	.....	.....	1	1	2
Bulbar paralysis.....	.....	1	1	.....	2	2
Cancer of duodenum.....	1	.....	1	1	.....	1
Cancer.....	.....	.....	.....	5	14	19
Cancer of liver.....	.....	.....	.....	.....	1	1
Cancer of stomach.....	.....	.....	.....	.....	1	1
Cancer of testicle.....	.....	.....	.....	1	.....	1
Cancer of uterus.....	.....	.....	.....	.....	1	1
Cerebral apoplexy.....	4	11	15	33	73	106
Chorea and septicaemia.....	1	.....	1	1	.....	1
Chronic nephritis.....	8	7	15	35	23	58
Cirrhosis of liver.....	.....	.....	.....	1	.....	1
Cystic degeneration of kidneys.....	.....	.....	.....	1	.....	1
Concussion of brain.....	.....	.....	.....	1	.....	1
Debility of old age.....	.....	3	3	26	43	69
Debility of old age and fracture of femur	.....	.....	.....	.....	2	2
Diabetes mellitus.....	.....	.....	.....	1	1	2
Diarrhœa.....	.....	.....	.....	7	20	27
Dilation of heart.....	.....	.....	.....	1	2	3
Disseminated cerebro-spinal sclerosis...	.....	.....	.....	1	.....	1
Drowning (suicidal).....	.....	1	1	.....	1	1
Dysentery.....	.....	.....	.....	8	7	15
Epilepsy.....	3	3	6	41	35	76
Empyema.....	.....	1	1	1	1	2
Endocarditis.....	3	1	4	7	1	8
Enteritis.....	1	2	3	18	20	38

Table No. 7—(Continued).

CAUSE OF DEATH.	YEAR ENDING SEPTEMBER 30, 1897.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Epithelioma of bladder				2	....	2
Erysipelas				4	7	11
Exhaustion from acute mania				6	8	14
Exhaustion from acute melancholia				21	6	27
Exhaustion from chronic mental disease	2	2	4	37	55	92
Exhaustion from hemiplegia				1	....	1
Fatty degeneration of heart		1	1	....	3	3
Fatty degeneration of liver .....				....	1	1
Fracture of ribs and lumbar vertebra				1	....	1
Gangrene of leg				1	....	1
Gastritis	1	....	1	2	1	3
General paresis	7	4	11	70	19	89
Hemorrhage from stomach and shock .....				....	1	1
Wound in neck (suicidal)				1	1	2
Hip joint disease				1	....	1
Influenza		1	1	1	5	6
Intestinal obstruction				6	3	9
Intestinal ulceration				1	....	1
Locomotor ataxia				4	....	4
Meningitis		2	2	4	4	8
Œdema of lungs .....				....	1	1
Pericarditis	1	1	2	2	1	3
Peritonitis		2	2	6	4	10
Phthisis pulmonalis	10	18	28	118	189	307
Pharyngeal abscess				2	....	2
Pneumonia	17	21	38	105	90	195
Pleurisy				1	1	2
Psoas abscess .....				....	1	1
Pulmonary abscess				1	2	3
Pulmonary gangrene				1	....	1
Pulmonary hemorrhage .....				....	1	1
Pyelitis				1	....	1
Pyo nephrosis	1	....	1	2	1	3
Rupture of aorta .....				....	1	1
Rupture of internal carotid artery, due to carcinoma of neck .....				....	1	1
Rupture of heart .....				....	1	1
Senile gangrene				1	....	1
Septicæmia	2	....	2	6	2	8
Strangulated hernia	1	....	1	1	1	2

Table No. 7—(Concluded).

CAUSE OF DEATH.	YEAR ENDING SEPTEMBER 30, 1897.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Suppurative endocarditis.....	.....	.....	.....	.....	1	1
Suppurative hepatitis.....	.....	.....	.....	1	.....	1
Tubercular peritonitis.....	.....	.....	.....	.....	2	2
Tuberculosis of kidneys.....	.....	.....	.....	1	.....	1
Typhoid fever.....	.....	.....	.....	2	4	6
Ulcer of stomach.....	.....	1	1	.....	1	1
Valvular disease of heart.....	6	7	13	67	64	131
Total.....	71	91	162	687	741	1428

TABLE No. 8.

Showing Hereditary Tendency to Insanity in Patients Admitted During
the Current Year and Since October 1, 1888.

	YEAR ENDING SEPTEMBER 30, 1897.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Paternal branch.....	15	9	24	110	137	247
Maternal branch.....	25	30	55	164	193	357
Paternal and maternal branches.....	2	2	4	18	32	50
Collateral branches.....	22	16	38	179	189	368
No hereditary tendency...	69	15	84	587	457	1,044
Unascertained.....	39	89	128	673	769	1,442
Total.....	172	161	333	1,731	1,777	3,508

TABLE No. 9.

Showing Civil Condition of Patients Admitted During the Current Year and Since October 1, 1888.

CIVIL CONDITION.	YEAR ENDING SEPTEMBER 30, 1897.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Single	81	49	130	869	655	1,524
Married	71	72	143	663	760	1,423
Widowed	19	37	56	154	322	476
Divorced	1	2	3	13	11	24
Unascertained .....	.....	1	1	32	29	61
Total	172	161	333	1,731	1,777	3,508

TABLE No. 10.

Showing Degree of Education of Patients Admitted During the Current Year and Since October 1, 1888.

DEGREE OF EDUCATION.	YEAR ENDING SEPTEMBER 30, 1897.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Collegiate	2	1	3	22	10	32
Academic	14	5	19	110	95	205
Common school	118	81	199	1,049	996	2,045
Read and write	2	2	4	72	19	91
Read only	14	11	25	82	110	192
No education	6	10	16	127	119	246
Unascertained	16	51	67	269	428	697
Total	172	161	333	1,731	1,777	3,508

TABLE No. 11.

Showing the Duration of Insanity Previous to Admission, and the Period Under Treatment of Patients Who Died During the Current Year and Since October 1, 1888.

	YEAR ENDING SEPTEMBER 30, 1897.						SINCE OCTOBER 1, 1888.					
	DURATION PREVIOUS TO ADMISSION.			PERIOD UNDER TREATMENT.			DURATION PREVIOUS TO ADMISSION.			PERIOD UNDER TREATMENT.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
Under one month.....	6	9	15	6	8	14	38	28	66	49	35	84
One to three months.....	4	5	9	9	4	13	33	32	65	76	64	140
Three to six months.....	4	2	6	4	5	9	35	27	62	60	55	115
Six to nine months.....	4	5	9	5	6	11	37	24	61	31	50	81
Nine months to one year....	2	.....	2	3	4	7	22	17	39	38	33	71
One year to eighteen months..	4	5	9	7	12	19	37	33	70	55	52	107
Eighteen months to two years.	1	2	3	1	4	5	17	20	37	41	43	84
Two to three years.....	12	6	18	6	8	14	79	61	140	56	46	102
Three to four years.....	3	9	12	9	5	14	44	55	99	58	46	104
Four to six years.....	3	8	11	4	7	11	51	69	120	40	50	90
Six to ten years.....	5	8	13	4	6	10	59	81	140	63	66	129
Ten to twenty years.....	8	14	22	9	12	21	68	89	157	93	139	232
Twenty years and over.....	6	1	7	4	10	14	32	42	74	27	62	89
Not insane*.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Unascertained.....	9	17	26	.....	.....	.....	135	163	298	.....	.....	.....
Total.....	71	91	162	71	91	162	687	741	1,428	687	741	1,428
Average duration of insane life (give years and tenths).....	.....	.....	.....	10.1	6.1	8.1	.....	.....	.....	10.5	11.6	11.5

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 12.

Showing Ages of Those Admitted During the Current Year and Since October 1, 1888.

AGE.	YEAR ENDING SEPTEMBER 30, 1897.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
From 10 to 15 years.....	2	1	3	7	3	10
From 15 to 20 years.....	8	3	11	56	31	87
From 20 to 25 years.....	12	5	17	135	86	221
From 25 to 30 years.....	18	11	29	155	135	290
From 30 to 35 years.....	11	18	29	162	170	332
From 35 to 40 years.....	10	14	24	190	182	372
From 40 to 50 years.....	29	48	77	341	439	780
From 50 to 60 years.....	33	24	57	303	335	638
From 60 to 70 years.....	24	19	43	203	220	423
From 70 to 80 years.....	19	15	34	142	144	286
From 80 to 90 years.....	6	3	9	36	32	68
From 90 to 95 years.....	.....	.....	.....	1	.....	1
Total	172	161	333	1,731	1,777	3,508

TABLE No. 13.

Showing Ages of Those Discharged Recovered During the Current Year and Since October 1, 1888.

AGE.	YEAR ENDING SEPTEMBER 30, 1897.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
From 10 to 20 years.....	7	3	10	12	9	21
From 20 to 30 years.....	6	9	15	62	56	118
From 30 to 40 years.....	6	3	9	46	62	108
From 40 to 50 years.....	9	6	15	43	42	85
From 50 to 60 years.....	8	2	10	35	24	59
From 60 to 70 years.....	3	1	4	12	6	18
From 70 to 80 years and over .....	.....	.....	.....	2	3	5
Total	39	24	63	212	202	414

TABLE No. 14.

**Showing Ages of Patients Who Died During the Current Year and
Since October 1, 1888.**

AGE.	YEAR ENDING SEPTEMBER 30, 1897.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
From 15 to 20 years				4	1	5
From 20 to 25 years		1	1	16	13	29
From 25 to 30 years	4	3	7	31	21	52
From 30 to 35 years	4	7	11	36	37	73
From 35 to 40 years	6	7	13	64	41	105
From 40 to 50 years	15	17	32	114	143	257
From 50 to 60 years	14	11	25	144	167	311
From 60 to 70 years	11	19	30	121	146	267
From 70 to 80 years	14	22	36	118	134	252
From 80 to 90 years	3	4	7	38	35	73
From 90 to 95 years				1	3	4
Total	71	91	162	687	741	1,428

TABLE No. 15.

**Showing Alleged Duration of Insanity Previous to Admission of
Patients Admitted During the Year Ending September 30, 1897.**

DURATION OF INSANITY.	Men.	Women.	Total.
Under one month.....	37	22	59
One to three months.....	20	13	33
Three to six months.....	22	15	37
Six to nine months.....	8	9	17
Nine months to one year.....	7	2	9
One year to eighteen months.....	9	15	24
Eighteen months to two years.....		1	1
Two to three years.....	13	10	23
Three to four years.....	6	6	12
Four to five years.....	4	6	10
Five to ten years.....	12	17	29
Ten to fifteen years.....	7	8	15
Fifteen to twenty years.....	2	8	10
Twenty to thirty years.....	3	4	7
Thirty years and upwards.....	4	5	9
Not insane*.....	2		2
Unascertained.....	16	20	36
Total.....	172	161	333

* Includes cases of alcoholism, morphia habit, etc.

TABLE No. 16.

Showing Period of Residence in Asylum of Patients Remaining Under Treatment September 30, 1897.

PERIOD OF RESIDENCE.	Men.	Women.	Total.
Under one month.....	10	30	40
One to three months.....	28	14	42
Three to six months.....	26	30	56
Six to nine months.....	30	25	55
Nine months to one year.....	24	23	47
One year to eighteen months.....	104	109	213
Eighteen months to two years.....	57	110	167
Two to three years.....	53	99	152
Three to four years.....	167	92	259
Four to five years.....	63	51	114
Five to ten years.....	232	209	441
Ten to fifteen years.....	84	93	177
Fifteen to twenty years.....	110	117	227
Twenty to thirty years.....	118	151	269
Not insane*.....	.....	.....	.....
Total.....	1,106	1,153	2,259

* Includes cases of alcoholism, morphia habit, etc.

TABLE No. 17.

Showing the Occupation of Those Admitted During the Current Year and Since October 1, 1888.

OCCUPATION.	YEAR ENDING SEPTEMBER 30, 1897.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Professional:						
Clergy, military and naval officers, physicians, law- yers, architects, artists, authors, civil engineers, surveyors, etc	8	.....	8	37	5	42
Commercial:						
Bankers, merchants, ac- countants, clerks, sales- men, shopkeepers, shop- men, stenographers, typewriters, etc	17	.....	17	142	4	146

TABLE No. 17—(Concluded).

OCCUPATION.	YEAR ENDING SEPTEMBER 30, 1897.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Agricultural and pas- toral:						
Farmers, gardeners, herds- men, etc.....	56	.....	56	510	2	512
Mechanics at outdoor vocations:						
Blacksmiths, carpenters, engine fitters, sawyers, painters, police, etc....	19	.....	19	279	.....	279
Mechanics, etc., at sed- entary vocations:						
Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc.....	12	.....	12	98	.....	98
Domestic service:						
Waiters, cooks, servants, etc.....	.....	15	15	18	1,024	1,042
Educational and higher domestic duties:						
Governesses, teachers, stu- dents, housekeepers, nurses, etc.....	6	118	124	35	502	537
Commercial:						
Shopkeepers, saleswomen, stenographers, type- writers, etc.....	.....	1	1	.....	4	4
Employed in sedentary occupations:						
Tailoresses, seamstresses, bookbinders, factory workers, etc.....	.....	5	5	10	81	91
Miners, seamen, etc.....	1	.....	1	19	.....	19
Prostitutes.....	.....	.....	.....	.....	1	1
Laborers.....	50	.....	50	459	.....	459
No occupation.....	2	22	24	96	110	206
Unascertained.....	1	.....	1	28	44	72
Total.....	172	161	333	1,731	1,777	3,508

TABLE No. 18.

Showing the Nativity of Patients Admitted During the Current Year
and Since October 1, 1888.

NATIVITY.	YEAR ENDING SEPTEMBER 30, 1897.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Connecticut.....	3	.....	3	9	7	16
Florida.....	.....	1	1	.....	1	1
Georgia.....	.....	.....	.....	.....	1	1
Illinois.....	1	.....	1	4	2	6
Indiana.....	.....	.....	.....	1	4	5
Iowa.....	.....	.....	.....	1	.....	1
Kansas.....	.....	.....	.....	.....	2	2
Kentucky.....	.....	.....	.....	.....	3	3
Maine.....	.....	.....	.....	1	2	3
Maryland.....	1	.....	1	5	1	6
Massachusetts.....	1	1	2	15	7	22
Michigan.....	1	.....	1	8	3	11
Minnesota.....	.....	1	1	.....	2	2
Mississippi.....	.....	.....	.....	1	.....	1
Missouri.....	.....	.....	.....	1	1	2
New Hampshire.....	.....	.....	.....	3	2	5
New Jersey.....	.....	.....	.....	9	6	15
New York.....	111	93	204	1,040	956	1,996
North Carolina.....	1	1	2	2	2	4
Ohio.....	.....	.....	.....	4	1	5
Pennsylvania.....	3	4	7	48	31	79
Rhode Island.....	.....	.....	.....	1	.....	1
South Carolina.....	.....	.....	.....	.....	1	1
Texas.....	.....	.....	.....	1	.....	1
Vermont.....	.....	.....	.....	7	6	13
Virginia.....	.....	.....	.....	1	3	4
Wisconsin.....	1	.....	1	2	5	7
Armenia.....	.....	.....	.....	1	.....	1
Austria.....	.....	.....	.....	3	2	5
Bavaria.....	.....	.....	.....	1	.....	1
Canada.....	4	5	9	24	31	55
Denmark.....	.....	.....	.....	1	3	4
England.....	6	8	14	52	50	102
France.....	1	.....	1	11	3	14
Germany.....	10	1	11	119	138	257
Greece.....	.....	.....	.....	.....	1	1
Holland.....	.....	.....	.....	3	4	7
Hungary.....	.....	.....	.....	1	2	3
Ireland.....	17	20	37	186	352	538
Italy.....	1	3	4	8	6	14

Table No. 18—(Concluded).

NATIVITY.	YEAR ENDING SEPTEMBER 30, 1897.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Norway.....	1	.....	1	1	.....	1
Poland.....	.....	.....	.....	6	11	17
Russia.....	1	1	2	1	1	2
Scotland.....	1	1	2	7	10	17
Sicily.....	.....	.....	.....	1	.....	1
Sweden.....	.....	1	1	5	5	10
Switzerland.....	.....	.....	.....	7	.....	7
Wales.....	.....	.....	.....	1	.....	1
Unascertained (includes 3 men and 8 women known to be natives of the United States)	7	20	27	129	108	237
Total	172	161	333	1,731	1,777	3,508

Of the total number admitted since the 1st of October, 1890, the parents of 37 per cent. were both of foreign birth.

In two per cent. the parentage on the paternal side was foreign, while that on the maternal side was native.

In five per cent. the parentage on the maternal side was foreign, while that on the paternal side was native.

The records in this hospital prior to 1890 do not show the statistics required.

TABLE No. 19.

Showing the Residence by Counties and Classification of Patients
Admitted During the Year Ending September 30, 1897.

COUNTIES.	Public.	Private.	Total.
Albany.....	2	.....	2
Allegany.....	17	.....	17
Broome.....	.....	.....	.....
Cattaraugus.....	.....	.....	.....
Cayuga.....	31	2	33
Chautauqua.....	.....	.....	.....
Chemung.....	.....	.....	.....
Chenango.....	.....	.....	.....
Clinton.....	.....	.....	.....
Columbia.....	2	.....	2
Cortland.....	.....	.....	.....
Delaware.....	.....	.....	.....
Dutchess.....	.....	.....	.....
Erie.....	1	.....	1
Essex.....	.....	.....	.....
Franklin.....	.....	.....	.....
Fulton.....	1	.....	1
Genesee.....	28	.....	28
Greene.....	.....	.....	.....
Hamilton.....	.....	.....	.....
Herkimer.....	.....	.....	.....
Jefferson.....	.....	.....	.....
Kings.....	.....	.....	.....
Lewis.....	.....	.....	.....
Livingston.....	.....	.....	.....
Madison.....	.....	.....	.....
Monroe.....	17	.....	17
Montgomery.....	.....	.....	.....
New York.....	2	.....	2
Niagara.....	1	.....	1
Oneida.....	.....	.....	.....
Onondaga.....	.....	.....	.....
Ontario.....	39	.....	39
Orange.....	.....	.....	.....
Orleans.....	10	.....	10
Oswego.....	.....	.....	.....
Otsego.....	.....	.....	.....
Putnam.....	.....	.....	.....
Queens.....	1	.....	1
Rensselaer.....	6	.....	6
Richmond.....	1	.....	1
Rockland.....	.....	.....	.....
St. Lawrence.....	.....	.....	.....

TABLE No. 19—(Concluded).

COUNTIES.	Public.	Private.	Total.
Saratoga.....			
Schenectady			
Schoharie.....			
Schuyler.....	9		9
Seneca.....	17	1	18
Steuben.....	70		70
Suffolk	3		3
Sullivan.....			
Tioga.....			
Tompkins.....	22		22
Ulster			
Warren.....			
Washington.....			
Wayne	23		23
Westchester.....	2		2
Wyoming	2		2
Yates	15		15
Soldiers' Home.....	8		8
Total.....	330	3	333

TABLE No. 20.

Showing the Residence by Counties and Classification of Patients
Remaining Under Treatment September 30, 1897.

COUNTIES.	PUBLIC.			PRIVATE.		
	Men.	Women.	Total.	Men.	Women.	Total.
Albany	73	123	196	.....	.....	.....
Allegany	34	38	72	.....	.....	.....
Broome .....	.....	.....	.....	.....	.....	.....
Cattaraugus	15	2	17	.....	.....	.....
Cayuga	98	70	168	.....	.....	.....
Chautauqua	16	4	20	.....	.....	.....
Chemung	41	38	79	.....	.....	.....
Chenango .....	.....	.....	.....	.....	.....	.....
Clinton .....	.....	3	3	.....	.....	.....
Columbia	1	12	13	.....	.....	.....
Cortland .....	.....	.....	.....	.....	.....	.....
Delaware .....	.....	.....	.....	.....	.....	.....
Dutchess .....	.....	2	2	.....	.....	.....
Erie	87	11	98	.....	.....	.....
Essex	5	5	10	.....	.....	.....
Franklin	12	7	19	.....	.....	.....
Fulton	12	10	22	.....	.....	.....
Genesee	36	33	69	.....	.....	.....
Greene	3	1	4	.....	.....	.....
Hamilton	2	.....	2	.....	.....	.....
Herkimer	6	10	16	.....	.....	.....
Jefferson	1	.....	1	.....	.....	.....
Kings .....	.....	.....	.....	.....	.....	.....
Lewis	5	2	7	.....	.....	.....
Livingston	21	24	45	.....	.....	.....
Madison	3	3	6	.....	.....	.....
Monroe	21	25	46	.....	1	1
Montgomery	11	11	22	.....	.....	.....
New York .....	.....	2	2	.....	.....	.....
Niagara	34	9	43	.....	.....	.....
Oneida	1	5	6	.....	.....	.....
Orondaga	28	38	66	1	.....	1
Ontario	81	74	155	.....	1	1
Orange	9	3	12	.....	.....	.....
Orleans	21	20	41	.....	.....	.....
Oswego	2	6	8	.....	.....	.....
Otsego .....	.....	.....	.....	.....	.....	.....
Putnam	1	3	4	.....	.....	.....
Queens	16	27	43	.....	.....	.....
Rensselaer	15	86	101	.....	.....	.....
Richmond .....	.....	14	14	.....	.....	.....

Table No. 20—(Concluded).

COUNTIES.	PUBLIC.			PRIVATE.		
	Men.	Women.	Total.	Men.	Women.	Total.
Rockland.....	1	2	3	.....	.....	.....
St. Lawrence.....	.....	.....	.....	.....	.....	.....
Saratoga.....	12	13	25	.....	.....	.....
Schenectady.....	9	15	24	.....	.....	.....
Schoharie.....	1	.....	1	.....	.....	.....
Schuyler.....	31	24	55	.....	.....	.....
Seneca.....	47	48	95	.....	1	1
Steuben.....	91	88	179	.....	.....	.....
Suffolk.....	7	6	13	.....	.....	.....
Sullivan.....	1	.....	1	.....	.....	.....
Tioga.....	.....	.....	.....	.....	.....	.....
Tompkins.....	38	43	81	1	.....	1
Ulster.....	1	24	25	.....	.....	.....
Warren.....	1	4	5	.....	.....	.....
Washington.....	.....	15	15	.....	.....	.....
Wayne.....	48	37	85	.....	.....	.....
Westchester.....	15	61	76	.....	.....	.....
Wyoming.....	16	13	29	.....	.....	.....
Yates.....	27	33	60	.....	.....	.....
Soldiers and Sailors' Home	23	.....	23	.....	.....	.....
State paupers.....	24	3	27	.....	.....	.....
Total.....	1,104	1,150	2,254	2	3	5

APPENDIX.

REPORT ON DIPHTHERIA OUTBREAK AT WILLARD
STATE HOSPITAL.

ALBANY, August 12, 1897.

To the State Board of Health:

The continued prevalence of diphtheria in the Willard State Hospital was called to the attention of the State Board of Health by the Medical Superintendent, Dr. W. A. Macy, early in August, with a request that an investigation be made, and in response I went there for this purpose, August 11th.

The following is a report of the cases, in the order of their occurrence, given me by Dr. Macy:

CASES OF DIPHTHERIA.

1. November, 1896.—Grandson of locomotive fireman employed on grounds; home in Baileytown, adjoining grounds; had spent a day at Watkins two days before sickness began; no known exposure; attended by Dr. Denniston, of Ovid; had pharyngeal symptoms; was sick a few days only; was quarantined with all the family for three weeks by order of the health board; disinfection, etc., afterwards; recovery. It is known to the hospital physicians that the quarantine was not strictly observed in this case. The child was seen out in seven or eight days after report of illness.

2. February 5, 1897.—Superintendent's child, age 2 years and 7 months; lived in cottage on grounds; no known exposure; tonsils and larynx involved; no culture made; antitoxin used late; sanitary conditions, fair; one open sewer was found in basement; died 8th February.

3. February 11, 1897.—Nurse, age 28; kissed case 2 on 4th of February, and nursed her through illness; pharynx involved; K. L. bacillus found; antitoxin; recovery.

4. February 28th.—Patient, age 30; lived on third floor, north wing, main building; worked about grounds and had been at superintendent's house; was accustomed to put straws and other small objects into his mouth; had croupous stomatitis for ten days, then pharyngeal and laryngeal involvement; K. L. bacillus found; antitoxin used; erythematous eruption after taking phenacetin. Sanitary conditions: Crowded ward, damp basement, from which air entered ward by heating flues; defective plumbing; recovery.

5. March 24th.—Patient, age 16; lived on ground floor, north wing, main building; worked about grounds picking up paper, etc.; no known exposure; pharyngeal involvement; extensive exudation; K. L. bacillus present; antitoxin used; erythematous eruption after phenacetin; recovery. Sanitary conditions: Same as in case 4.

6. April 6th.—Nurse, age 25; worked on ground floor, north wing, main building; remained with case 5 during night of March 24th; no other exposure known; pharyngeal exudation distinctly membranous; K. L. bacillus present; antitoxin used; sanitary conditions as in 4 and 5; recovery; had erythematous eruption after taking acetanilid and quinine.

7. July 6th.—Dining-room attendant in detached building No. 3; age, 25; had returned from two weeks' vacation on 4th; no exposure known, though sore throats, said by physicians (in letter to the superintendent) of the neighborhood not to be diphtheritic, prevailed where she had been visiting; membranous exudation in pharynx; K. L. bacillus found; antitoxin used; sanitary conditions good; recovery.

8. July 14th.—Patient, age 53; in detached building No. 3; membranous exudation in pharynx; bacteriological report showed K. L. bacilli; antitoxin used. Had been transferred from north wing of main building July 7th. Worked about grounds. Sanitary conditions: Main building as in case 4; detached building 3, good; recovery.

The rapid development and disappearance of the eruption in the cases in which this was present, its location and "block" distribution, with the mode of invasion and after history of the disease, led to the conclusion that it was a drug eruption.

All the above cases were quarantined and were not released until bacilli were no longer found in their throats.

Cases in which there was no membrane exudation, but bacteriological examination showed the K. L. bacillus:

1. April 12th.—Attendant, second floor, north wing, main building; age 35; no known exposure; follicular tonsilitis; no membrane seen; K. L. bacillus found; recovery.

2. May 23d.—Patient in detached building No. 3; age 25; worked about grounds; no exposure known; ulcerative tonsilitis; no membrane; K. L. bacillus found; recovery.

3. April 14th.—Patient, age 53; in detached building No. 2; follicular tonsilitis; no membrane; K. L. bacillus found; no known exposure; had not been out of building for several weeks. Sanitary conditions: Plumbing defective in design, but not broken; basement damp; recovery.

4. May 11th.—Patient, age 40; in same building as last, but in another wing; worked in tailorshop; acute tonsilitis; no membrane; K. L. bacillus found in abundance.

There were a large number of other cases in which the clinical appearances were similar to those of the above, but no bacteriological examinations were made, or else if made showed no K. L. bacilli.

CASES OF SCARLATINA.

1. May 2d.—Patient, age 23; north wing, main building; admitted to hospital April 23d, from Newark; no known exposure; typical case; recovery.

2. May 16th.—Patient, age 23; north wing of main building; admitted to hospital May 5th, from Lyons; there was a history of suspicious cases in his neighborhood; there was no contact with case 1; typical case; recovery.

3. June 7th.—Attendant, age 24; north wing of main building, on hall in which case 1 was taken sick; no other exposure known; typical case; recovery.

The Willard State Hospital is one of the largest of this class of institutions, having a population of more than 2,700 patients and employes. It is located on the eastern border of Seneca Lake, a body of water four miles wide at this point and thirty-five miles in length. The shores rise very abruptly from the lake, and there is a continuous gradual upward slope back to the corresponding declivity to Cayuga lake, having at the center an elevation of 600 feet above Seneca lake. Slate rock outcrops and the alluvial shale, which allows of good drainage, has much clay and hard pan, with the gravel, at some points, not far beneath the surface. The region is said to have a moderate rainfall and low humidity.

The hospital occupies a large territory used for farming chiefly, and consists of a main building and four others known as detached buildings, all two-story brick structures, beside other executive buildings. The main building, with a central portion for administration, and extended north and south wings, provides for 900 inmates, and was erected thirty years ago, the other buildings being of more recent construction.

There are two sources of water supply; one by gravity, taken from a small stream and collected in three small, rudely constructed reservoirs; the other from Seneca Lake, by means of pumping, the intake pipe extending some distance into the lake at a point slightly to the north of the hospital buildings. At the present time the latter alone is used, the gravity supply being under suspicion, because of a frequently occurring ill odor and a constant turbidity.

The sewage from the hospital empties into the lake without treatment to the south of the intake, most of it being collected in a long main sewer, but several smaller ones empty directly.

The sanitary history of the institution is a good one. Infectious diseases have been infrequent, and, so far as could be

learned, there has been heretofore, for years at least, no prevalence of them which might be called epidemic.

The present outbreak was no doubt an imported one. Cases of diphtheria are known to have occurred in the surrounding country and the hospital receives its accessions from these constantly. No direct history of the source was obtained.

Dr. Macy reports cases of actual membranous diphtheria, showing the presence of the Klebs-Loeffler bacillus, and also cases of sore throat without membrane, in which the bacillus was looked for and discovered. There were also a large number of cases similar to the latter class, cases of sore throat without exudate, which were not tested bacteriologically, but which would no doubt have shown the presence of the bacillus. The number of these is not recorded.

It is to be noted that the subjects were almost exclusively adults, and there were no deaths, except of the little child of Dr. Macy, early in the outbreak.

As to sequence of cases, they began in February, and, with intervals, were continuous through July. For three or four weeks prior to this time there have been no new cases.

As to distribution, they have developed chiefly in the north wing of the main building; but cases have occurred also in two of the detached buildings, and non-membranous sore throats were found to occur in all.

As to the management, a small separate building was set apart in which all cases were isolated; their surroundings were fumigated, and, so far as could be learned, this care against spread was intelligent and thorough, as would be anticipated in an institution so completely under medical supervision.

The germs of this epidemic were without question conveyed to the hospital from outside, for we know that diphtheria originates only from a pre-existing case, even though we may not trace the exact source and course by which it came. It is probable that there was more than one direct importation from an outside source among the cases occurring here since the commencement.

In like manner it is beyond question that an epidemic is maintained in the same way. Commonly diphtheria continues to recur in a locality from imperfect isolation of the sick and inefficient measures for destruction of the disease germs. There are many avenues for the escape of these germs, and some of them fail of being stopped. But while this may occur in ordinary epidemics, as we so frequently find, it is not likely to in a hospital where physicians understanding well the conditions under which diphtheria propagates itself, have entire control.

The sanitary surroundings of an epidemic of diphtheria, especially when limited to an institution, have to be always considered—the sewage, soil drainage and water supply all have some bearing on a case of this sort.

We find the main building, and especially the north wing of it, the chief site of prevalence.

This building was erected thirty years ago, and much of the plumbing now in it is the same as first introduced, to which new plumbing has been occasionally added. At the present time a good deal of this drain pipe is worn out, especially as single-thick pipe, which would not now be trusted to, was used, and it is consequently no longer safe to retain. The system is faulty from lack of modern requirements, such as back airing and the like, and the whole is complicated by additions made from time to time. The main soil pipes empty into earthenware drain pipes buried beneath the ground, which would not be allowed at the present time. They empty outside into a tile sewer, which is a mile long, and has no vent except as it may secure it from the plumbing of the buildings wasting into it. The plumbing of this building has been inspected by Mr. Henri D. Dickinson, sanitary engineer, of New York, who by inspection and test found it faulty, and recommended its entire removal and the substitution of an entirely new system, as he believed it not susceptible of any partial renewal. I think that no other conclusion can be reached in regard to it, and while it would involve a considerable outlay of money, there is no way otherwise to make this building

sanitary. It seems safe to say that the recent sickness has been in a measure due to the defects in the sewerage of the building.

At the same time, another unsanitary feature could be remedied, which always has a bearing on the prevalence of the disease under consideration; the soil-saturation of the site of the building. The ground of the cellars is damp, from some cause, under much of this north wing, less so of the south wing. There is a covering of concrete, not all of it perfect, and the soil could not be seen, but it is probable that it is in clay, which holds the moisture of the soil, with no provision for its escape. It should be drained, and it would be well if it were covered with a layer of asphalt.

The water supply of the hospital deserves a reference in this connection, although there is no reason to suppose from what we know of the spread of diphtheria that it is communicated in this way. At present the water used for drinking is being boiled before use.

The gravity supply which was the original one for the institution is, I believe, conceded to be unworthy of further use for potable purposes. It is probably communicated from surface drainage, it is badly stored in crude earth reservoirs, it is very turbid and of brown tan-bark color, and gives off an odor which is probably, however, due to algae growth and harmless. I should think this water had better not be used to drink unless purified by slow sand filtration.

The Seneca lake supply is perhaps also susceptible of improvement. The water of this large lake is beautifully clear, objects being visible through it to an unusual depth. This point is sixteen miles distant from Geneva and there is no other considerable place on the lake. There is, I believe, no regular current in the lake other than a surface one set up by the wind. It has a depth of 500 or 600 feet. Off the asylum the bottom shelves very gradually for several hundred feet, but 200 feet beyond the mouth of the intake pipe it suddenly drops precipitately to 500 feet. The pipe lies on the bottom which, at its mouth, is about twenty feet be

neath the surface. The trend of the shore is such that the sewer outlets from the hospital buildings are within a few hundred feet of this intake. As I saw them the light scum rising at these points of discharge was being carried steadily to the south and away from the intake, following the direction of the wind. It would appear probable that an opposite wind would carry this surface scum toward the north.

Two remedies suggest themselves for the possible contamination of this water supply, which, I think, can hardly be rendered impure, except from the waste of the hospital itself.

By carrying the intake pipe to the deep water 200 feet further, water could be taken from a depth which would be affected neither by surface matter nor by deposits on the bottom stirred up by a storm.

More radical would be discontinuing the discharge of raw sewage into the lake. This could be done by providing chemical treatment and precipitation works, to which all the sewage could be brought and only a purified effluent discharged into the lake. Many of the villages of this State having a smaller population than the 3,000 of this community are thus treating their sewage before it is admitted to running streams. No very large cost would be involved to rectify the existing sewers, adapting them to this purpose, and to construct works for this purpose.

It is probable that the present outbreak has substantially come to an end. But I would recommend these sanitary improvements, which, indirectly at least, have a bearing upon it, and which would be for the future healthfulness of the institution.

Respectfully submitted,

(Signed) F. C. CURTIS.

Opinion by Dr. B. T. Smelzer, Secretary, etc., of the State Board of Health, Concerning the Possible Contamination of the Water Supply of the Willard State Hospital.

(Copy).

DANIEL LEWIS, M. D., *President*.

BAXTER T. SMELZER, M. D., *Secretary*.

NEW YORK STATE BOARD OF HEALTH,
ALBANY, October 8, 1897. }

Dr. W. A. MACY, *Medical Superintendent, Willard State Hospital*.

Dear Sir.—In reply to your request for an official opinion from this office as to the possible contamination of the water supply of Willard State Hospital, I would say that in consideration of the conditions surrounding it as I know them and as reported upon by Dr. Curtis there is such a possibility. The main supply and probably the only future available source is from Seneca Lake, into which the sewage of the institution is discharged without treatment.

I do not think that the risk is very immediate or that under ordinary conditions the sewage is likely to reach your intake at present, since the points of discharge are somewhat remote and there is not a decided current in the body of water of the lake.

It has not been apparent that the water has shown sewage contamination from the history of sickness in the hospital, for it is improbable that the late prevalence of diphtheria is traceable to this source since it is not to be considered a water-borne disease, nor has it been extensive enough in distribution to warrant that conclusion. The common water-borne diseases, such as typhoid fever, diarrhoeal diseases and the like have not been prevalent.

It is however, certain that the institution is exposed to the development of such diseases by the body of water into which the sewage of so large a number of people is discharged being the source of potable supply, and to the lowering of vitality of the inmates by the use of water which is exposed to occasional

admixture of contaminating matter. This is possible since the points of discharge are not very remote from the intake and since the current if there is any in the lake is towards the north, that is from the existing outlet of the sewers towards the intake of the water.

Flocculent matter is seen to rise to the surface, marking the mouth of the sewers, and forming a stream for a considerable distance which may be seen upon the surface carried by the wind. As the water is not deep where the drains discharge, there will cause to be an accumulation of heavier matter on the bottom which by violent winds may be stirred up and with a wind in the right direction may be carried to the intake. It would seem to me then that while the danger is not immediate and imminent it is not remote that this contaminating material may reach the water supply, especially after the prolonged deposit of sewage into it and the expensive use of this source of supply and that steps should be taken in the not distant future to remedy what, if it should occur, would be a manifest unsanitary condition and one that should not exist.

I would suggest that it would be well for those having custody of the institution to take steps to the rectification of this, by employing a sanitary engineer to devise a plan for the purification of the sewage and perhaps for extending the water intake pipe to the deep water of the lake. Aside from its own sewage there is no reason to believe that there is any risk of contamination of the water, which is otherwise superior in quality and quantity.

Very respectfully, your obedient servant,

(Signed)

BAXTER T. SMELZER,

Secretary.

**Report of an Investigation of the Present Water Works System at the Willard State Hospital at Willard, N. Y.,
Together with Suggestions for a New System,
by Prof. A. H. Eldredge, Cornell University, Ithaca, N. Y.**

"The following report is intended to present briefly the condition of the present water-works system at the Willard State Hospital, Willard, N. Y., together with an outline of the proposed new system, with estimates for the same.

"LOCATION OF BUILDINGS.

"The main building of the Willard State Hospital is located on the shores of Seneca lake, while the majority of the buildings are situated along a central road running east from the lake, the distance from the lake to the farthest building being over one mile.

"NEEDS FOR A NEW SYSTEM.

"The present existing conditions for all buildings above the lake-water reservoir, as shown on the map, is such as to demand immediate attention. In case of fire they are absolutely without fire protection, save such as could be given by one or two cisterns and one steamer, as the upper reservoirs run dry during the summer months, while the water supply afforded by the upper reservoirs is at any time unfit for domestic purposes, as will be seen by the report.

"THE PRESENT WATER-WORKS SYSTEM.

"At present there are two distinct water-works systems which supply water for the buildings and grounds. The principal system consists of two Worthington pumps, situated on the shore of the lake, which force the lake water into a reservoir at an elevation of some 200 feet above the level of the lake. This water is used for all buildings between the reservoir level and that of the lake. The other buildings, including the Branch, Infirmary, D. B. 3 and the barns, are supplied from three small reservoirs located some 4,300 feet east of the Branch. The location of the

buildings to be supplied by the new system can be seen in drawing No. 1.

"The reservoirs supplying these buildings open one into the other, and are neither bricked or cemented, but are merely holes in the ground. They are supplied by a small creek whose source is at Ovid, about three miles east of Willard. This stream, which might have supplied plenty of water twenty years ago, is of no use to-day. The writer followed the course of the creek from the reservoirs to its source. He found that the lower reservoir contained about seven feet of black, muddy water. The second reservoir had about twelve to fifteen inches of water in the center of a large mud hole lined with dead fish. The third reservoir was perfectly dry, the bottom being covered with dead fish.

"Leaving the reservoirs, the creek wound through the fields, mostly pasture land. The bed of the creek in most places was perfectly dry. In other places it passed through swampy lands where at no time would there be much current to the water, making germ breeding places for disease. The writer also found barnyards, pig-yards and outhouses draining directly into the creek.

"So far as could be learned there are no sources of water supply that could be used to augment this worse than useless supply.

"The head of water at the Branch, due the creek reservoirs, is not over ten to twelve pounds, and will not reach the eaves of the buildings, thus making the natural head utterly useless for fire purposes, while the amount of water in the reservoirs would supply the fire engine but a short time.

"At the present time the buildings above the lake reservoir are supplied with water from the lake reservoir by means of a small pump at the reservoir. This, for fire purposes, would be entirely inadequate, and affords but false security.

"THE PROPOSED NEW SYSTEM.

"The lake-water reservoir, hereafter to be spoken of as the reservoir, is situated on the main road, some 3,000 feet from the lake, at an elevation of about 200 feet above the lake. Just east

of the reservoir is the electric light plant, the fire department building and a small pump-house. It is proposed to take down the pump-house and to build a wing to the electric lighting plant for a pump-room. This will be so constructed that one man can take charge of both the lighting and pumping plants. The existing capacity of the boiler is sufficient to do the work of both lighting and pumping.

“THE PUMP.

“At this point it is proposed to locate a pump of 1,200,000 gallons capacity, the pump to be supplied with steam from boilers now in place and with water from the reservoir.

“THE COURSE OF THE PIPE LINE.

“Starting at the pump-house the piping will run north 112 feet, crossing the road, then west 930 feet with branches extending to D. B. 1, and to Hadley Hall. It will also extend east about 3,000 feet with connections for D. B. 3, the Infirmary and the Branch, ending at a stand pipe. There will also be a branch line commencing 1,763 feet east of the pump-house and extending 773 feet south, then west 900 feet, with connections for the barns, farmhouse, hennery and the south end of D. B. 3.

“THE STAND PIPE.

“The present drawings provide for a stand pipe 10 feet in diameter and 45 feet high above its foundations, located just back of the Branch. The top of the stand pipe to be 25 feet above the eaves of the building, thus affording sufficient head for all domestic purposes, while for fire service a valve is provided at the stand pipe which can be closed, thus allowing the pressure at the pump to be increased over its normal pressure up to 150 pounds per square inch. For all buildings, save the Branch, the normal head would be sufficient at all times for fire service.

“The top of the stand pipe will be 177 feet above the level of the reservoir, giving a normal working pressure of about seventy-seven pounds at the pumps. The greatest pressure will come at

Hadley Hall, located some 52 feet below the reservoir level, giving a head at Hadley Hall of 229 feet, or about ninety-eight pounds per square inch. The advisability of extending the line west to Hadley Hall and D. B. 1, is seen when we consider that the normal head due the reservoir at Hadley Hall is but twenty-two pounds, while the normal head at D. B. 1 is but fifteen pounds.

“EMERGENCY CONNECTIONS.

“At the west side of the reservoir connections will be made with a 12-inch pipe leading directly from the lake pumps to the main line of the new system. These connections should not be used except in case of accident at the reservoir plant, when direct connection could be made with the lake pumps and the lake water forced directly to the stand pipe.

“WATER-WORKS SYSTEMS.

“There are three principal water-works systems, each having its advantages and disadvantages and each its advocates. They may be classified as the reservoir, the stand-pipe or tank, and the direct pumping systems.

“The reservoir is undoubtedly the best system where it can be used, but has as its disadvantages, its great first cost.

“The stand-pipe system can be classified as the next best system and can be used, as in the present case, where it would be next to impossible to construct a reservoir without going to great expense. Its advantages over the direct system are: The constant pressure possible throughout the system, less liability to water hammer, thus less liability to breakage, and, therefore, is a more reliable system in case of emergency, and will bring repairs down to a minimum. It has all the advantages of the direct system in that by the closing of one valve the pressure can be increased throughout the system to any desirable amount.

“The only real disadvantage of the stand-pipe system over the reservoir system is that the stand-pipe can not store up a large quantity of water to be used while the pumps are shut down.

“Even this disadvantage is not as real as it appears, for the pumps must be kept working in the reservoir system in case of a large demand for water, or the supply in the reservoir will soon be exhausted.

“The direct system pumps directly into the mains and relies wholly on pump-governors and safety valves to take care of the pressure carried, and the water pumped. Undoubtedly it is the cheapest system to construct, but experience has shown that the pressures carried are not as uniform as in the other systems, and also that the dangers arising from water hammer and breakage are greater than either of the other systems, making the cost of repairs greater than in either the reservoir or stand-pipe systems.

“THE CAPACITY OF THE PRESENT BOILERS AND PUMPS.

“At the pumping station situated at the lake are two Worthington pumps of 3,500,000 gallons capacity in twenty-four hours. Either pump, during the past season, was of sufficient capacity to supply all the buildings and grounds with the exception of the Branch, which was not piped up to the reservoir at the electric light station.

“This building receives its supply from the old reservoirs. By adding this building to the system, an additional amount of water, from 12,000 to 15,000 gallons per twenty-four hours would have to be supplied. This could be done by slightly increasing the service of the pump working or by running both pumps together for a short period each day when the demand for water is greatest.

“The boiler capacity at the electric light station is ample, none of the boilers being used during the daytime when the pump would be called upon for its greatest service, while up to the present time but two or three boilers have ever been used at any one time.”

Report on Examination of the Plumbing, Drainage and Water Supply of Willard State Hospital by Henri D. Dickinson, C. E., Sanitary Engineer, Lincoln Building, Nos. 1 and 3 Union Square, New York City.

(Copy.)

NEW YORK, May 17, 1897.

DR. WILLIAM A. MACY, *Superintendent Willard State Hospital, Willard, N. Y.:*

Sir.—I have the honor to state that in accordance with your instructions, I made an examination of the plumbing and drainage system and fixtures of the main building of the Willard State Hospital, and the following is my report:

PLAN OF WORK.

The plan and general arrangement of the work, which includes the house drains, soil, waste and vent pipes, is generally defective. As this work was installed about thirty years ago, no degree of blame is attachable to any person connected with it. I believe it was planned and executed as well as the average work of plumbing was understood or done at that period. Additions from time to time have not improved it in any respect, but on the contrary rendered it more inferior and less secure from a sanitary point of view.

As the house drains are laid beneath the basement floor, I am unable to inform you of their condition. They could not be tested, and I did not deem it advisable to expose them. Your Mr. Rowley informs me that they are earthenware, and that parts recently examined show no signs of deterioration. While this statement is doubtless true, it is fair to assume that it, too, has suffered from use; also, that the plan and workmanship are of no higher order than the balance of the system. No engineer would at this day dream of using earthenware inside a building, however well laid, because it is unreliable, and this hospital is for all intents and purposes a modern building, so far as its use is concerned.

The house drains are provided with earthenware traps, and these are too inaccessible. There are no fresh-air inlet pipes, a very necessary adjunct when the drains are tapped.

The soil pipes, originally excessive in diameter, extend up into the attic, a few full calibre, but the majority are reduced to one-ninth the area of their cross section at the floor of the third story. In the attic all are reduced to one and one-half inches diameter, those over Wards 7, 8 and 9, north and south, being carried this diameter nearly sixty feet before they reach the outer air. The soil pipe for Wards 4, 5 and 6, north, had for its vent an opening consisting of a three-quarter inch valve. The uselessness of pipes diminished to such extent is so evident that comment would seem unnecessary.

The waste pipes for serving-room sinks also extend up into the attic, reduced in area, and in addition they are trapped at their base, a scheme directly opposed to pipe ventilation.

MATERIALS.

The materials of the soil and waste piping are of poor quality. The branch waste pipes throughout the building are made of wrought iron, put together with steam pipe fittings. Some are well graded, but many are level. Nearly all are insufficient—a one-inch pipe being made to serve for several fixtures, including slop and wash sinks. Their connections with the soil pipes are made with flange and bolt on the pipe surface, and not with fittings generally used for such purposes.

TRAPS.

The water-closets are provided with the regulation trap, imbedded in the masonry of the arch, inaccessible and without proper clean-outs. A few wash-bowls have traps of an anti-siphon pattern. The bath traps are made of iron pipe fittings, consisting of several parts upon which a number of other fixtures depend, as their waste pipes discharge into them. It may be stated as a rule that nearly all are inefficient or useless. A trap to be serviceable as such must conform to the following

conditions: It must be of smooth bore and easy curve, must have sufficient depth so as to secure a perfect seal and protection against loss by evaporation or disturbance, it must be placed close to the fixture, and it should be accessible. None of the traps examined meet these conditions with the exception of those under the water-closets, and these conform in part only.

There is an entire absence of trap ventilation, except the little obtained through the constricted ends of the soil pipes, so that trap siphonage is not an infrequent occurrence daily.

FIXTURES.

The water-closets in all the wards are antiquated, corroded, inefficiently flushed, and very unsightly. Some have seats made of wood fibre, some of natural wood, and others metal. The non-absorbent material of the wood fibre being worn off, renders them difficult to keep clean, and the wooden seats are split—all are uncomfortable. A few water-closets are flushed from the service pipes direct, and the balance from bucket tanks located in the bathrooms adjoining. A very large quantity of water is used daily, two-thirds of which is ineffectual, because of the construction and form of the fixtures.

Of the urinals adjoining the water-closets in the male wards nothing of a commendable nature can be said. Some are iron and others earthenware. They are untrapped and discharge into the water-closets adjoining. The tanks which flush the water-closets supply these urinals also, and as in the case of the former, much water is discharged into them without effect.

The lavatories consist of earthenware basins set in marble slabs and long cast iron sinks. Several basins are trapped as above stated. The sinks are not provided with sufficient faucets to meet the needs of the patients. One small stream of hot, and one of cold water can hardly be deemed sufficient to enable twenty-five or thirty patients to wash with any degree of expedition or perfection. These sinks are untrapped.

The slop sinks are cast iron without sides or backs, deep, box-like affairs, altogether unfitted for the service required of them,

because of their waste pipes, which are one inch diameter. They are not trapped and if used as receptacles for slops must necessarily require much flushing and cleaning to render them tolerable.

The bath tubs are cast iron of a type long since abandoned. The greater part of the paint which once lent them an appearance of cleanliness has disappeared, and instead, black and unsightly spots difficult to keep clean have taken their place. Each pair of bath tubs has one trap made of steam pipe fittings which serves also for the smaller fixtures twelve feet or more distant. I observed two little affairs dignified as spray baths. One was in operation. Inefficient (they are also dangerous because slight carelessness may result in scalding a patient) as they are, I consider them far better than the repulsive cast iron, coffin-shaped bath tub with its contents frequently used to bathe a number of patients. If placed on the first floor instead of the third, they would render better service because of the additional pressure obtained.

The work in the center and center rear differs in character, plan, materials, and workmanship from that of the north and south wings above described. This is owing to the fact that the work is of recent installation. I regret to state, however, that the arrangement of it is not intelligent, nor the workmanship as faithful as they should be. In the administration building the work is almost entirely hidden from view, that which is exposed or can be reached, indicates that the work has either been shirked, or the purpose of trap ventilation was not properly understood. The branch trap vent pipes are defectively arranged and the main vents instead of being carried up through the roof have been made to project through the wall under the cornice of the main building. A soil pipe is reduced to one-fourth its diameter and vented into the chimney. But for these I might have tested the work and ascertained its character where hidden under floors and partitions. Part of the system in the center is provided with fresh air pipes which would be more effective if the inlets were

not reduced in area, and would be less likely to prove a nuisance if carried farther away from the building. The materials and fixtures are good, and with slight expense the work in this portion of the structure can be greatly improved, tested, and made secure and effective.

The basement of the center rear contains work and fixtures similar to that in the north and south wings. That in the upper portions is of a modern character both in regard to materials and fixtures. Its arrangement is crude, and much of the work where exposed defective. The soil and vent pipes are hidden behind casings and partitions, consequently their exact condition throughout was not ascertainable.

In regard to the water supply pipes I would state that their arrangement is in general without method. There are no circulation pipes, the absence of which is always productive of much waste of warm water. The faucets and valves are old, worn, and leaky.

The fire lines, valves, and hose reels are in most inaccessible places. Should necessity arise for their immediate use I venture to say that five to ten minutes must elapse before they can be brought into play, as they can only be reached by a ladder or table. There is but one place for fire apparatus in a public institution and experience dictates that this is the corridor, where it can be seen and reached by any person.

The manner in which the wastes from the steam kettles and other utensils in the public kitchen are disposed of is in my opinion destructive to the sewers, and should be discontinued.

In addition to the defects above noted, the following deserve mention inasmuch as they form no inconsiderable and unimportant part in the aggregate which make up the sum of the faulty conditions previously mentioned, and which renders the plant in its present condition a useless and unsanitary one.

There are no catch basins on the line of sewers, consequently foreign bodies, such as towels, etc., are discharged into the lake, and are subsequently picked up in large numbers along the shore.

A few basins of this kind would separate such bodies from the sewage proper and materially assist in breaking up fecal matter, and thus render the sewage less objectionable to the surroundings.

The cast iron piping under the public kitchen contains several incomplete, leaky expanded joints. The work is crudely put together with joints in the opposite direction of flow. The fresh air pipe for this system is nearly disjointed at the point it rises above the grade. The bell traps connected with this work are unreliable.

In the vegetable room the joints of the pavement are not tight. As considerable water is used on this floor daily, much of it fails to reach the drain, but soaks away and renders this part of the basement damp and unhealthy. At the time of my inspection the trap of the drain in this and the milk room were removed and an open way provided for sewer gas to enter the premises, infect the food, and vitiate the atmosphere.

At several parts of the basement under the wings I observed defective joints in the soil and waste pipes covered with canvas, also connections of drips from the heating system. Such connections should never be permitted as they are destructive to the materials and jointing.

The connection of the staff kitchen sink with the sewer is such that it frequently becomes obstructed through collection of grease.

The soil and vent pipes from fixtures in the staff toilet-room open too near the windows. The trap vent pipe for basins is improperly arranged, and a vent coupling from basin trap loose.

The soil pipe which extends through ward four, south, is corroded and shows signs of perforation. The washroom attached to this ward contains broken wash basins and marble slab.

On the first floor of the nurses' hall the water closets are broken, and the vent pipe connection with trap of slop sink is defective. On the second floor one water closet is broken.

I have pointed out as near as possible all the defects in the plumbing and drainage system which appeals to the eye of an

experienced observer, and I have endeavored to place them before you as free from technical description as conditions will permit, to the end that you may readily appreciate them, and through them the causes which induced you to have the examination made. From these observations, and this report, but one conclusion can be reached, namely, that the plumbing and drainage system, fixtures, and appliances connected therewith, with exceptions above noted, are extremely defective and unworthy to be retained, and further that the recent causes of diphtheria and other complaints among the patients may safely be attributed to the condition of affairs. As to the remedy there is but one thing—a new and complete system with all that it implies, sanitary fixtures, modern baths, improved lavatories, and durable materials. I would not advise any attempt to repair, alter or improve the present system. To temporize with it to any degree is to my mind doubtful economy. This change if decided upon should be effected during the fine weather, when windows are open, the building well aired, and the patients can be kept out of doors while the work is in progress.

Respectfully submitted,
(Signed), HENRI D. DICKINSON.

(Copy.)

NEW YORK, *August 7, 1897.*

Dr. WM. A. MACY, *Superintendent Willard State Hospital, Willard, N. Y.:*

Dear Sir.—I have looked into the subject of improving the sanitary condition of the main building, so far as the plumbing and drainage affects the same, and I have taken into consideration the present state of the piping, fixtures and arrangement thereof with the view of utilizing such portions as would effect a material reduction in the cost of installing a new plumbing system designed to meet the necessities of the hospital.

First, let me state frankly and without reservation that any scheme which involves the retention of the existing soil and waste pipes, water-closets, urinals and slop sinks would be wasteful and ineffective to meet the end in view, namely, to replace the old, worn out and defectively arranged plant by a new, safe and yet inexpensive system. It cannot be accomplished, and I would earnestly advise against the attempt. The best that could be done in the interest of economy would be to utilize such wash basins, sinks, baths, marble, brass work and water piping as are in good condition. This I would do as far as possible, if instructed to make plans and specifications for the work.

As to the cost, I estimate that a simple yet well arranged and durable system can be installed within the maximum limit of nine thousand dollars (\$9,000). This would include a number of man-holes and catch basins on the sewer system.

Very respectfully,

(Signed) HENRI D. DICKINSON.

THIRTIETH ANNUAL REPORT
OF THE
BOARD OF MANAGERS
OF THE
WILLARD STATE HOSPITAL
TO THE
STATE COMMISSION IN LUNACY
FOR THE YEAR 1898.

TRANSMITTED TO THE STATE COMMISSION IN LUNACY.

WYNKOOP HALLENBECK CRAWFORD CO.,
STATE PRINTERS,
NEW YORK AND ALBANY.
1899.

Dr. Macy's
COMPLIMENTS.

THIRTIETH ANNUAL REPORT

OF THE

BOARD OF MANAGERS

OF THE

WILLARD STATE HOSPITAL

TO THE

State Commission in Lunacy

FOR THE YEAR 1898.

OFFICERS OF THE HOSPITAL

MANAGERS.

HON. S. H. HAMMOND.....	Geneva.
WILLIAM J. POLLARD.....	Seneca Falls.
JOHN H. OSBORNE.....	Auburn.
ABRAM S. STOTHOFF.....	Watkins.
MARTIN L. ALLEN.....	Seneca Falls.
PROF. J. L. MORRIS.....	Ithaca.
MRS. C. S. MONGIN.....	Waterloo.

OFFICERS OF THE BOARD OF MANAGERS

PRESIDENT.

HON. S. H. HAMMOND, Geneva.

SECRETARY.

WILLIAM J. POLLARD, Seneca Falls.

TREASURER.

HON. J. B. THOMAS, Ovid.

ATTORNEY FOR WILLARD STATE HOSPITAL.

HON. S. S. PARTRIDGE, Phelps.

RESIDENT OFFICERS**MEDICAL SUPERINTENDENT.****WM. AUSTIN MACY, M. D.****FIRST ASSISTANT PHYSICIAN.****WILLIAM L. RUSSELL, M. D.****SECOND ASSISTANT PHYSICIAN.****THOMAS J. CURRIE, M. D.****ASSISTANT PHYSICIANS.**

ROBERT E. DORAN, M. D. FRED'K E. BOWLBY, M. D.
CHARLES F. SANBORN, M. D. WILLIAM STEINACH, M. D.

JUNIOR PHYSICIANS.

JOHN W. RUSSELL, M. D. DONALD L. ROSS, M. D.
ANTON R. SCHIER, M. D.

WOMAN PHYSICIAN.**J. ERNESTINE HILLS, M. D.****MATRON.****S. LOUISE LAIRD.****STEWARD.****MORRIS J. GILBERT.**

REPORT OF THE MANAGERS*To the State Commission in Lunacy:*

The managers of the Willard State Hospital have the honor to submit the thirtieth annual report of this institution by the Medical Superintendent, for the year ending September 30, 1898, together with the reports of the Treasurer and the Steward for the same period of time.

Respectfully submitted,

S. H. HAMMOND,

President of the Board of Managers.

REPORT OF THE MEDICAL SUPERINTENDENT

Hon. S. H. HAMMOND, *President of the Board of Managers, Etc.:*

Dear Sir.—I have the honor to present herewith to your honorable board the annual report for the Willard State Hospital, for the year ending September 30, 1898, with the usual statistical tables. The following table shows the movement of population for the period referred to:

	Men.	Women.	Total.
Remaining October 1, 1897.....	1,106	1,153	2,259
Admitted during the year.....	277	251	528
Total number treated during the year..	1,383	1,404	2,787
Average daily population.....	1,115	1,146	2,261
Discharged during the year.....	268	263	531

The patients discharged were divided
as follows:

Discharged as recovered	33	28	61
Discharged improved	35	39	74
Discharged unimproved	129	133	262
Discharged not insane.....	2	....	2
Died.	69	63	132
Remaining October 1, 1898.....	1,115	1,141	2,256

The population of the hospital covered by this report has increased by nine men, and decreased by twelve women, making a total decrease of three. The largest census obtained on any day was on February 25th, when we had 2,286 patients, and the smallest number was had on December 6th, when we had a census of 2,020. Of the patients admitted during the year 218 were brought direct from their homes; 14 were admitted from almshouses; 7 from hotels; 25 from jails; 5 from city hospitals; 254 were transferred from other New York State hospitals, and 5 were admitted from the Soldiers' Home. All of these admissions were public patients. There remained at the end of the year

three private patients. There were two patients admitted who were under the age of 15 years; 6.4 per cent. of the whole number were over 70 years of age, and of these, six were over 80. The largest number admitted were between the years of 40 and 50; the second largest number between the years of 50 and 60. The percentage of recoveries, calculated upon the daily average population, was 2.7 per cent., but if calculated upon the number of admissions it would be 11.5 per cent. Of the admissions, however, 254 were received by transfer from other State hospitals, and were, in almost all cases, patients suffering from chronic forms of insanity. If these were excluded, the percentage of recoveries, calculated upon the remainder of the admissions, would be 22.9 per cent. Of the 399 patients discharged from the hospital, 262 were transferred to other State hospitals in this State, 80 were discharged at the expiration of parole, 53 went direct to their homes, and 4 eloped. The death rate for the year was 5.6 per cent as against 7.1 per cent. for the preceding year.

One death occurred from suicide during the year. One of the patients (a man) ran from one of the parties of patients out walking and threw himself under a train while it was moving. This occurred on October 8th.

AMUSEMENTS.

There is little new that can be said under this caption. The amusements for the patients have virtually been the same as those reported in the previous year. There was no outbreak of contagious disease necessitating the abandonment of any of the ordinary avocations or of the amusements provided for the patients, and therefore our practice continued comparatively uniform in this respect during the year. The games of baseball, with one or two exceptions, had to be discontinued for the reason that we found it more difficult than last year to obtain satisfactory players. Outside clubs, however, were obtained for one or two games during the season, and music was provided by the hospital band upon these occasions. The field day was held as usual in September, and was very much more successful than

on previous occasions, a great deal of work having been done by both patients and employees to make this day pass off satisfactorily. One of the features was a parade of a series of floats, gotten up to exhibit and draw attention to the different pursuits and occupations followed by the inmates of the hospital. Almost every department was represented, and some of the floats were very attractive, and a great deal of credit is due to the officers and employees who conducted the matter, for the success they made of it.

THE SYSTEM OF PAROLE.

There has been very little change in this matter during the past year. The parole has been limited almost exclusively to those who follow some useful occupation and as a reward for the assistance they have given in the different lines of work engaged in by them. The parole has been quite limited in extent, and it is gratifying to be able to note that there have been but one or two cases in the entire year in which the parole was broken or taken advantage of.

OCCUPATION.

The occupations of the patients of the hospital have been increased somewhat during the year, several new industries having been developed, and I am pleased to state that the number of patients engaged at some form of useful occupation has been considerably increased, there having been 50.36 per cent of the total number of patients constantly employed during the past season. This is an increase during the year of 32.3 per cent. We have found it difficult to advance some lines of work, because of the small number of tradesmen following such occupations, who were admitted to the hospital, but we have had quite a good deal of success in certain directions by taking some of the suitable patients and instructing them in the occupations carried on, particularly so in the case of shoemaking. This has developed quite a little during the past year. In our last report we noted that six patients were regularly engaged, but the number since then has been doubled, and, by the addition of machinery, the output

from this industry has been largely increased. We now make all the shoes for the men patients in the hospital, and all the slippers and light shoes, and have begun to make some of the women's shoes. We find that those made by our patients will last longer than those formerly obtained, and we hope before a very great while to be able to provide all of the leather boots and all of the shoes needed by the hospital. The machinery that we have obtained for the manufacture of brooms has been put in use, and for almost all of the time since the last report we have made all of the brooms for the institution. We have also extended the manufacture of baskets, mats, etc., and have made all of the polishing brushes used. Little difficulty is experienced in getting our people to manufacture mats of good quality and good brushes, and these industries can be considerably extended. The usual amount of upholstering, mattress making, etc., has been done as in the past, as also the manufacture of all the rough harness of the institution. Patients have also assisted the painter and have been employed in the tailor shop, sewing room, laundry, kitchen and elsewhere about the institution as in previous years. The efficiency of a number of our departments has been considerably increased, and I am gratified to be able to report that in some of these divisions a very much greater amount of work has been done and with less laborious effort. Where the work is of such a character that only quiet patients of certain intelligence can be employed, this is a matter of some importance, for the reason that a sufficient number of this class can not always be readily obtained to supply the demands from the different departments of the hospital for this kind of patients.

WORK OF THE MEDICAL STAFF.

There is little new to note under this caption. The usual routine work has been continued during the past year. Monthly meetings of the medical society organized among the members of the staff (as well as a number of outside physicians in the immediate locality by invitation) have been held, and a great deal of interest has been shown on these occasions. The system was adopted

of taking up whatever subject was of present interest, and apportioning different phases of it to a number of gentlemen to prepare a series of papers on the subject for discussion at the meeting, so as to cover it as exhaustively as possible, and this has tended to considerably increase the interest in the meetings. The laboratory of the hospital has been very much improved during the last year, some additional apparatus for the convenience of doing the work has been added, and the facilities thus afforded have been used to advantage. In the equipment I would mention that a new electrical heater has been provided for our incubator, a very satisfactory one having finally been obtained from the American Electrical Heating Corporation, whom I was able to get to experiment in this matter. The heater that we use is a small electrical stove, placed directly beneath the incubator, the bottom being cut away for this purpose. With this appliance we have found that we could regulate the temperature of the incubator, taking the current direct from the wires in the building, to within one or two degrees.

The special eye work, conducted by Dr. John S. Kirkendall, during the previous year, has continued during the past year with benefit to the patients of the hospital.

The scope of the medical work of the hospital has been to some extent reorganized, our endeavor being to secure as close study as possible of the curable cases of insanity as well as the physically sick. The physicians in charge of the wards having chronic cases alternate in assisting with this work. Opportunities for observing and participating in the active work of the hospital are thus provided for all the staff, and by such methods we try to stimulate the zeal of the staff for progressive medical work.

The medical library, which had outgrown its old quarters, has been re-arranged in new book cases and a subject card catalogue has been made, which greatly facilitates the use of these books. Hydrotherapeutic measures are now being employed in treatment, as thoroughly as is possible with our limited appliances. Hot and cold packs and tonic ablutions have been the principal

procedures adopted, massage and passive exercises being also used in some instances at the same time. Our new bath-room affords the opportunity to use hot water either by spray or in volume (to the extent of a stream about one inch in diameter), and of almost any temperature, the range of temperature being controlled by a Gegenstrom apparatus. The favorable results obtained, thus far, have been rather in the direction of improvement in nutrition and general physical condition, than in hypnotic or sedative effects, although these have not been entirely wanting.

TRAINING SCHOOL FOR NURSES.

The training school for nurses has been conducted with considerable success. All the graduating class (20) were successful in obtaining certificates, and the general grade of their papers was very good. It is my opinion that the employees have taken considerably more interest in this work during the past year, and this has been a gratification to the officers who have endeavored to make it as interesting and profitable to them as possible. Twelve passed the junior examination and twenty-six entered the new junior class.

EPIDEMIC DISEASES, ETC.

A few cases of infectious disease developed during the past year. The main trouble from which we suffered was typhoid fever, and of this we had eleven well determined cases and two deaths. This appeared chiefly at the main building, but we have reason to believe that the cause for this disease is to be attributed, not only to defective plumbing, but to contaminated drinking water, and I would respectfully refer again to the conditions pointed out in last year's report, and to the absolute necessity of doing something to correct the conditions that now prevail.

After carefully investigating the systems of filtering drinking water and examining into the local conditions in regard to the drinking water supplied to this hospital, it is my opinion that any system of filtration which might be adopted that is now

known would be likely to prove inadequate and inefficient. The Pasteur filter affords the most advantages of any examined, and it has been thought possible, by the use of this filter, to secure immunity against typhoid germs, but it has not been found to thoroughly protect, the minimum protection extending but for a period of three days in the tests made. I believe that the introduction of this filter would not give satisfactory results, and I am afraid that in the hand of such employees as come and go in a large institution like ours, cases would arise where the filter would be improperly handled and that typhoid fever would occur in spite of its use.

It might be that if wells were driven in the gravel beds at considerable distance back and away from the hospital, a sufficient amount of water could be obtained by compressed air pressure in the well tubing, providing a new system of piping was employed, to secure a sufficient supply of drinking and potable water, the lake water being used for ordinary purposes. I would also state that in the investigations made at this hospital in the past, no source of water, except from the lake, of sufficient quantity, has been found thus far to meet the need, though a number of wells were driven near the buildings.

It would seem to me that the most effective way of meeting this condition would be to pick up the different sewage pipes emptying into the lake, at their outlets, and, having connected them together, to carry the main sewage pipe down the lake, or north of the hospital, to a distance of a mile or a mile and a half; and to carry the intake pipe (for the drinking water in the same way) up the lake, or south of the hospital, for an equal distance. In this way it would be possible to separate the sewage, emptying into the lake in the vicinity of the hospital, by so much distance from the end of the intake pipe, that the danger of contamination from this source would be minimized. In a lake as large as Seneca lake, if this procedure was followed, and the intake pipe was carried out into deep water at its extremity, there would not be any great amount of danger to be anticipated, and the pipe could be readily laid, particularly if the so called

ball and socket joint was used. This, and the well system, are about all we have to expect anything from, and I would respectfully urge upon your board the absolute necessity of doing something radical towards meeting this condition and preventing the continual danger of sickness by typhoid fever.

It has been said that other hospitals in other districts have a larger percentage of cases of typhoid fever, and, while that may be granted, it does not seem to me to be in any degree right to allow such conditions to prevail when it seems possible to prevent them, and when this is deliberately done and cases are allowed to develop without radical means being applied, because of the necessity of spending a few thousand dollars to obviate and correct such conditions, no criticism could be too severe for such treatment of so serious a subject. I think enough has been said in the past, as well as in the above remarks, about the dangers we are contending with from typhoid fever, to place the hospital squarely upon the record as protesting against so little attention being given this subject, and I earnestly request that your board shall do everything in your power to agitate this matter, until the conditions regarding the drinking water, ice supply, etc., that now prevail, are fully met with and corrected.

In connection with the above heading, I wish to state that we have been considerably alarmed over the introduction in the hospital district of smallpox. Quite a number of cases have appeared, particularly at Geneva and other towns, which seem to have been traceable to the moving around of a theatrical company known as the "Joshua Simpkins Company." These people, were finally quarantined at Geneva and placed on board the old steamboat "Onondaga," where they were detained until the last case became well. This company, it is understood, originally contracted smallpox in a small town in Virginia, and have carried the disease far and near in the villages and towns in this State. Quite recently another epidemic of smallpox has developed, this time starting in the town of McLean, and cases have also appeared in Allegany county, and also in a number of other places in and not far from the confines of the hospital dis-

trict. In the handling of epidemic diseases in country localities there seems to be always a large element of risk, from the fact that there is a disposition on the part of many local practitioners of medicine, either not to admit proper diagnosis of such disease, or to try and cover them over so that they may not be generally known. I have observed a tendency of this kind, personally, in the case of the epidemic of smallpox and in one of diphtheria, and recently, quite a strong comment on this subject has been made by Dr. F. C. Curtis, of Albany, N. Y., who is medical officer of the State Board of Health. Of course with the onset of cold weather, more and more danger is to be anticipated from diseases like smallpox, and seeing that it is almost impossible to get quarantine regulations carried out thoroughly at all places in a district as large as ours, and in which so many of the places are so isolated, I would respectfully draw your attention to the necessity for providing means for enabling us at any time to cope with trouble of this kind. By vacating one of the small cottages on the State property, we have been able to acquire a quarantine station. This is heated by stoves, and can be made to hold a few patients of either sex at the same time, but we still need proper facilities for disinfecting clothes, mattresses, bedding, etc., and although an apparatus of this kind is extremely expensive, the absence of it might prove very serious in case of an actual outbreak within our walls.

When the first cases of smallpox were known to have been recognized, we at once saw that all the patients and employees throughout the hospital were vaccinated, and this will be kept up, from time to time, as systematically as possible in order to afford the institution all the protection against this disease that can be obtained.

IMPROVEMENTS.

Among the improvements made in the hospital we would mention the following: With the approval of the State Commission in Lunacy, electric irons were substituted in the laundry for the old-fashioned irons. These have proven very satisfactory, the work is done more rapidly, and we are enabled to avoid alto-

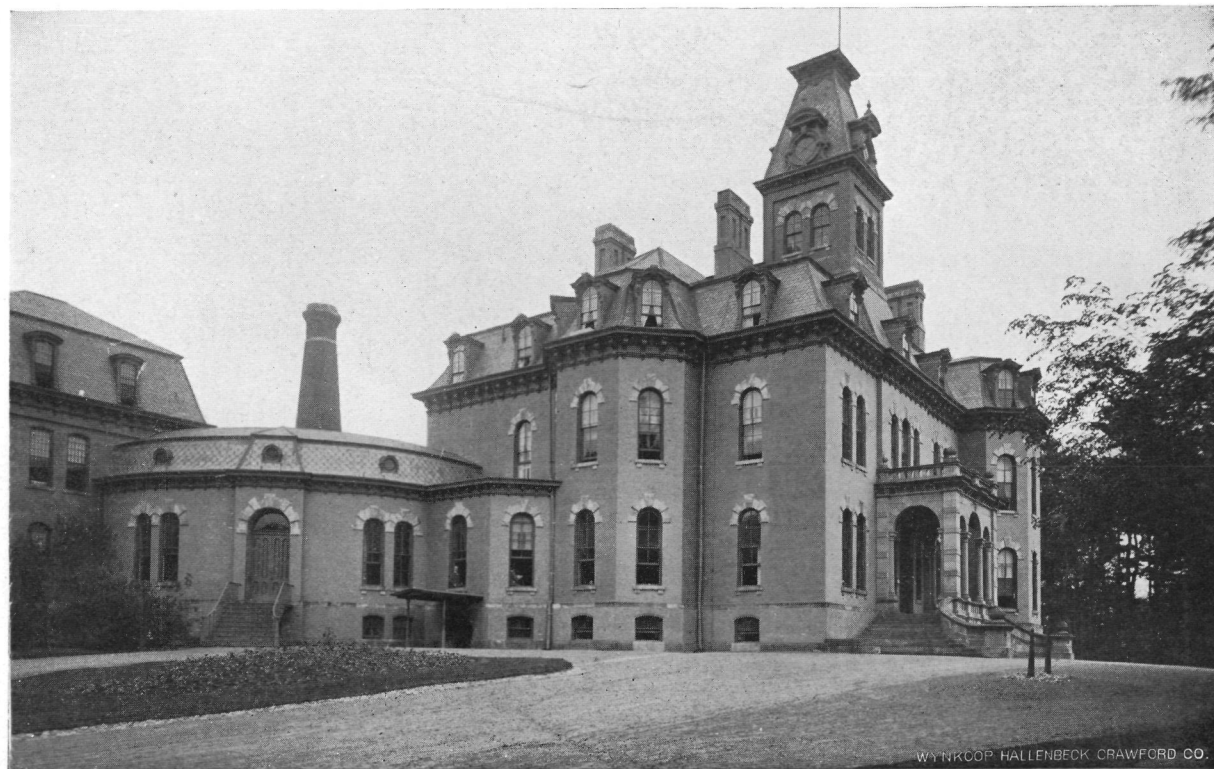
gether the large iron stove which was previously used, which added a great deal of heat to the room in summer and which was of considerable danger from the over-heating of the main flue. The building narrowly escaped burning down from this cause a year ago, and we are very glad to have this change. The patients accustomed themselves to the new irons almost immediately. The difference in the cost of running these irons, taking into consideration the saving in fuel for the stove, and at the same time the increase in the output of work, was hardly appreciable, and there was really a gain to the hospital from the fact that our dynamos have to be run during the day, and the cost of labor for operating was therefore so much reduced, that the efficiency of the irons more than compensated for the additional increase in the cost by fuel at the dynamos. An electric cloth-cutting machine has been added to the tailoring department, very much reducing the amount of time required by the cutter in his ordinary work, and enabling him to take a great deal more work of other kinds than heretofore. Where a large amount of cutting has to be done, the use of a machine of this kind is a very great economy. The railroad embankment between the laundry and the main building was considerably widened during the past year, and we hope eventually that this will be widened sufficiently to enable us to have a wagon road across this causeway wide enough to take the fire engine over in case of fire, and also sufficiently wide to enable us to keep the patients safely away from the railroad track. Workmen were employed, during the early portion of the present year, in putting the roofs of the buildings in order before the advance of the winter season, and changes were made in the storage building to increase the efficiency of the shops located there. The extension of the kitchen in the rear of the superintendent's house, originally planned by my predecessor, Dr. Mabon, was allowed during the past year by the Commission, and the extension erected. A breakwater was allowed by the Commission to be built at the water front to protect the dock, and we hope, during the present year, to extend this to the north of the warehouse,

thus protecting this shore, which is much damaged by storms. Quite a little apparatus was allowed for the new laboratory. Porcelain wash-sinks were allowed us in connection with the operating rooms of the hospital wards. Some five or six hundred dollars' worth of machinery was allowed us by the Commission for the manufacture of shoes, and this has been used to good advantage by us during the past year. Arrangements were made during the year, by a committee of superintendents, with the Fidelity and Casualty Company of New York, for the insuring of twenty-six of the hospital boilers for three years, from January 15, 1898. About two hundred and fifty dollars was allowed the hospital for the purchase of fruit trees. Screens to protect the clothes in the drying-rooms of the laundry from coming in contact with the heating pipes were ordered during the year. The painting of the outside of the main building was included in moneys provisionally allowed us, but we were unable to take up this work during the fine weather because of the delay experienced in getting some data in regard to machinery we wished to try to facilitate the work, and, owing to the advance in the season, it has been thought best to allow this to hold over until some time later. The plumbing of the north wing and the erection of manholes for venting the trunk sewers of the hospital, referred to before, were allowed at a cost of a little over ten thousand dollars. An equipment of dental tools and apparatus for use in the hospital was allowed, at a cost of about two hundred dollars. With the removal of the old piggeries and the erection of new ones east of the railroad track, it became necessary also to remove the old slaughter-house, and this work is now well under way. Both piggeries and slaughter-house will be completed this season. Moneys were allowed us, during the year, for certain repairs to the buildings. This has long been required, and the work is progressing as rapidly as possible. A wire fence was allowed for the north and east sides of the main hospital grounds at an expense of about two thousand dollars, and fourteen hundred dollars was allowed for repairs to the fan-room destroyed by fire at the time the old laundry and store-

room were burned down. Somewhat over seven thousand dollars was allowed for the extension of the water supply for the east buildings. These latter changes, when completed, will enable us to supply all the buildings with lake water, and to have a much better system of fire protection. It also provides for a pipe through the main garden for irrigating purposes. About three thousand five hundred dollars was allowed for remodelling what are known as the "Van Vleet" and "Meddick" houses. An outfit for spray painting, at a cost of about four hundred dollars, was allowed by the Commission in connection with the work of painting the outside of the main buildings mentioned above. There has been considerable delay in getting this delivered, owing to our inability to secure certain data early in the season and because of the delay in shipment, but we hope to effect a great saving in labor in the matter of painting plain surfaces, such as side walls, ceilings, the exterior of buildings, etc.

We expect that the heating of the south wing branch and a few other portions of the institution will be considerably improved this winter, because of our being able to add considerable heating surface. In the provisional apportionments made last spring, we were also allowed \$300 for an air compressor for cleaning clothes, carpets, etc.; \$630 for the construction of a second breakwater for the landing; \$250 for the extension of waterways, gutters, etc., including drains around the buildings, whose basements were damp, and \$500 for the extension of the culvert under the railroad embankment.

In addition to the above items, most of which were arranged for, either by provisional apportionment allowed us in the spring or moneys allowed by actual requisition during the year, a great many other matters of considerable importance to the hospital have been attended to, such as grading and draining the ground around various of the outside buildings, the improvement of the lawns, the filling in and grading of most of the land to the east and south of the electric light plant, the extension of the farm, garden, miscellaneous grading, ditching, etc. The old coal pockets near the branch were removed during the year. Besides



WILLARD STATE HOSPITAL.—MAIN BUILDING.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 1.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 2.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 3.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 4.



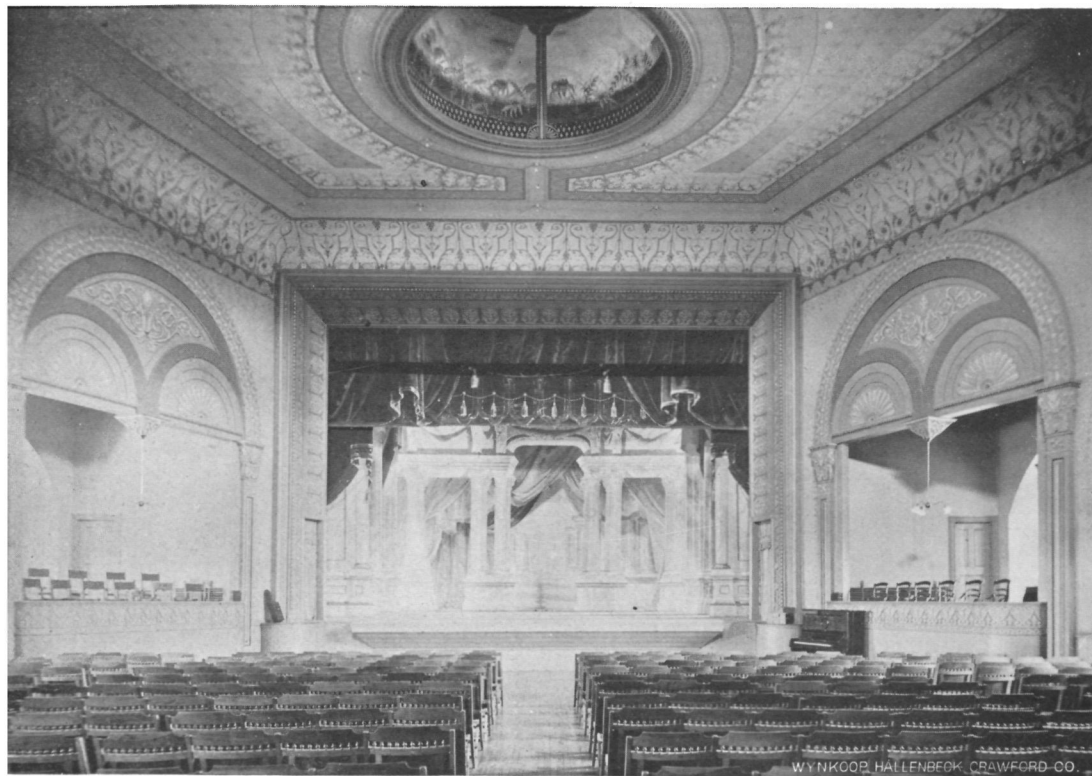
WILLARD STATE HOSPITAL.—VIEW OF BRANCH FROM SOUTHWEST SIDE.



WILLARD STATE HOSPITAL.—INFIRMARY FOR MEN.



WILLARD STATE HOSPITAL.—THE AMUSEMENT HALL.



WILLARD STATE HOSPITAL.—INTERIOR OF AMUSEMENT HALL.



WILLARD STATE HOSPITAL.—LAUNDRY.



WILLARD STATE HOSPITAL—THE NORTH WING OF THE MAIN BUILDING.



WILLARD STATE HOSPITAL.—BIRD'S-EYE VIEW OF HOSPITAL AND GROUNDS.

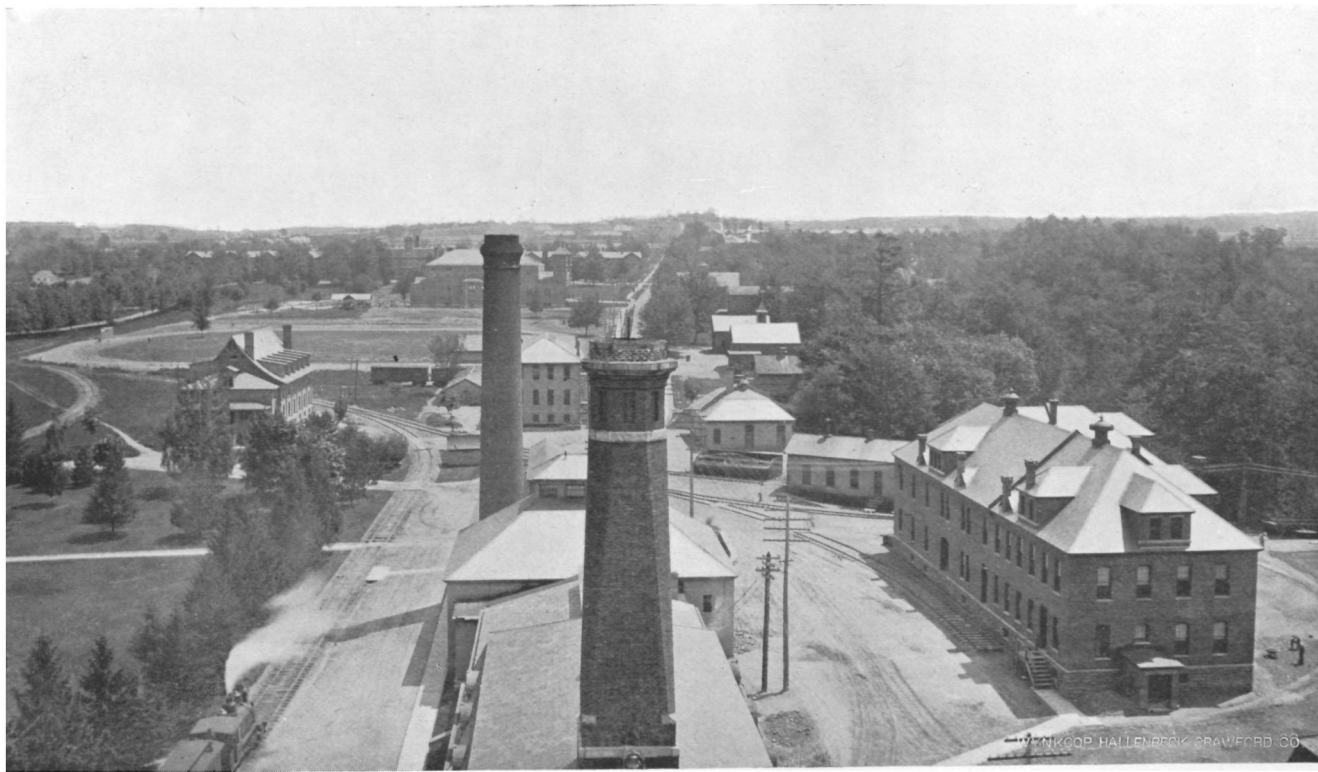


WYNGOOP HALLENBECK CRAWFORD CO.

WILLARD STATE HOSPITAL.—BIRD'S-EYE VIEW LOOKING SOUTH FROM MAIN BUILDING.



WILLARD STATE HOSPITAL.—BIRD'S-EYE VIEW LOOKING TOWARDS THE LAKE FROM THE BRANCH.



WILLARD STATE HOSPITAL.—BIRD'S-EYE VIEW LOOKING EAST FROM TOP OF MAIN BUILDING.



WILLARD STATE HOSPITAL.—VIEW IN FRONT OF ADMINISTRATION BUILDING.

these improvements and betterments, the usual amount of work of various kinds was done by the different mechanical departments attached to the hospital.

NEEDS OF THE HOSPITAL.

In drawing attention to the wants that I would mention under this heading, I would respectfully state that, while the money allowed us for improvements by the Commission for the present year is very much larger than the amount that was allowed us for the preceding year, a great deal remains to be done which we could not even attempt to take up. The work of replumbing the hospital, where needed, was begun, and the contract was let for venting the line of trunk sewers for the hospital at proper points, and this work has been satisfactorily concluded. A contract was also awarded for the replumbing of the entire north wing, where most of the trouble has occurred from typhoid fever, diphtheria, etc., and this work is now about completed. This has included the provision of a general bathing-room for this whole wing on the first floor, and while it had to be placed in connection with the reception ward, we hope that it may be possible, by an outside stairway and a combined clothes-room and dressing-room, to enable us to bring the patients from the other wards to this room without seriously interfering with the work of the reception ward.

It is greatly to be hoped that the beginning made in the matter of plumbing will lead to a continuation of this improvement during the coming year, and that this work will be prosecuted as rapidly as possible until the entire hospital is equipped with new plumbing. As I suggested in my last report, it would seem desirable that a certain amount of this work should be done each year in order to enable us to divide the expense, and yet have this work completed as soon as possible. The replumbing of the south wing will probably cost about seven thousand dollars. Additional bathing facilities are required for the remainder of the hospital, including a combined bath-room, with clothes-room attached, etc., for the south wing.

To change the plumbing in the outside buildings in order to introduce the spray bath in the place of tubs only, would probably require a matter of \$3,000, and a building properly constructed for the south wing, comprising a large enough storage room for all the clothes in the south wing, as well as a bath and dressing-room, would probably cost a matter of \$15,000.

A good beginning was made last year in the purchase of fruit trees and plants for increasing the output of the farm and garden in small fruits, and it is extremely desirable that more should be done during the coming season in this direction. We were allowed a little less than three hundred dollars last year, and five or six hundred more will be necessary for the coming year in order to extend this matter in the interests of the hospital.

The matter of extending the accommodations for the working patients for last year has been met by the Commission allowing us funds for the remodelling of the Van Fleet and Meddick houses, and we hope, when this work is completed, to care for sixteen or eighteen patients at each of these places. By remodelling these old buildings and making changes, we are enabled to utilize them. While not very perfect in their character, these houses will make the patients quite comfortable and be a considerable relief, if our capacity is not again overtaxed by filling up the small amount of much needed space thus gained.

In place of the steel fence previously asked for, the Commission has finally allowed us to substitute a wire fence with steel posts, the cost of which is much less, and this has been extended to the north and east of the main grounds of the hospital, and it seems to be very satisfactory in construction and appearance. The cost of this fence has been about two thousand dollars, and if the additional expenditure of about the same amount should be incurred some time in the future, the main grounds of the hospital could be very satisfactorily inclosed. With the same expenditure of money, I think it is possible to get more fencing because of the possibility of our people doing the work themselves, thereby saving the outside labor.

We hope it may be possible, with the consent of the Commission, to purchase mechanical stokers for feeding the different boilers in the engineers' department during the coming winter. From the study given this subject, it would seem possible for us to burn a comparatively low grade of soft coal with these stokers with advantage to the hospital, so far as lack of smoke is concerned, and with more gratifying results as regards their steam producing qualities than we have heretofore obtained by hand firing, and the use of these stokers will also enable us to get more service out of our boilers and to do it with somewhat less help. I think it would be extremely advantageous and economical if these were put under our boilers; the extra expense would be about ten or twelve thousand dollars additional.

The usefulness of the detached buildings would be largely increased if the different sections were connected by permanent and wide hallways, converting the present separate dayrooms into what would then be large double dayrooms. This change could be made for about eight thousand dollars. This would largely increase the efficiency of the work of the attendants employed upon these divisions and prevent the necessity of leaving one attendant alone with a comparatively large number of patients, a matter which is always attended with a great deal of danger, particularly in the case of women, notwithstanding the fact that few accidents have happened in this way. These detached buildings could be utilized to considerably better advantage if, in connection with the change suggested, some of the wards in these buildings could be converted into dormitory wards and a few of our dining and dayrooms were enlarged. At present the dining-rooms are unsafely crowded and considerable more trouble is experienced than is at all desirable in institutions of this kind, because of this crowding and other conditions that necessarily result.

OVERCROWDING.

In this connection I would state that the evil effects of overcrowding have been lamentable during the past year, particularly

in the main building. With the increase of disturbed and semi-disturbed cases, some of the wards in the main building, because of our lack of accommodations for acute cases and hospital cases, have become extremely noisy, and violence has increased among the patients, the general condition becoming anything rather than ideal. With such conditions, the number of minor accidents must always increase and the general effect, particularly upon acute cases, is extremely bad. This hospital is in great need of relief in this matter, and while I do not undertake to say that the relief is more needed here than at some of the other hospitals in the State, it is of the greatest importance that conditions of this kind be corrected as soon as possible and the great tendency towards overcrowding be checked.

While speaking of this matter of overcrowding, I draw attention to the fact that, under the new law, chapter 636, Laws of 1898, it has been made mandatory for the State Commission in Lunacy "to determine from time to time, the capacity of each of the State hospitals, and to incorporate a statement of such capacity in its report to the Legislature."

In compliance with this law, the Lunacy Commission called upon us on April 15th to give them a statement, in figures, regarding the capacity of this institution, both by buildings and by wards, and we prepared tables, which were forwarded with our reply, to show, as fairly as possible, these conditions. As stated above, great difficulty has been experienced from overcrowding in the main building because of the lack of classification, and the necessity of caring for as large a number as possible of our disturbed and semi-disturbed patients there (particularly when acute), it being necessary to have them as near the administration office as possible. As the number of these cases has increased the various wards of the main building have become more and more disturbed, an increasing number of minor accidents have continued to happen, and the whole building has become more noisy than in the past. To offset the very great overcrowding in most of the dormitory wards, we have had to leave the doors open at night, and, as we have not been supplied

with night attendants on all these wards (even where disturbed patients were care for), these conditions have reacted against the hospital service. Wherever we have single rooms, these having generally about 1,080 cubic feet, the conditions have been very good, for the reason that it was not possible to crowd in any more patients; but, in the dormitory rooms, patients have been gradually added all over the hospital until, in a great number of these, there is only about 400 cubic feet of air space per patient. To be sure the old rule of 1,000 cubic feet of space to provide for a changing atmosphere, does not mean that it is a fixed limit exactly, because of the variations and rapidity of change of air to which the atmosphere in these rooms is subject. In cold weather, windy weather, etc., the air in these rooms might change with sufficient rapidity to enable one to get good ventilation; or, even in a room quite a little smaller theoretically, but in the summer, or in very hot weather, particularly on very hot nights, the reverse would be the case, and under such conditions even 1,080 feet would seem none too much for desirable conditions; but here at Willard we have the additional disadvantage (at almost all the buildings), of having stationary upper sash in the windows that cannot be opened in any way for ventilation, and the increase of patients in the dormitory wards and rooms has continued at all the buildings until, in a large number of these rooms, the cubic space allotted to sleeping quarters of patients is considerably below 600 feet, and, in some instances, even below 400 feet, as was stated in speaking of the main building. The crowding in the dining-rooms will be realized when I state that the cubic space allotted to patients eating in these dining-rooms is, in some instances, less than 100 cubic feet per patient, and in all cases less than 200. With the large number of windows in our buildings and because of the prevailing breezes during most of the season, these evils are somewhat mitigated, but the conditions are so extreme that they can not but be greatly deplored, and it is to be hoped that within a short time such conditions will have ceased to exist anywhere in the State service. In summing up my report of capacity to the Lunacy Commission, I suggested a

series of figures representing the capacity at which it might be desirable to allow the wards to temporarily remain because of the conditions to be met and which now prevail in the State to such a large degree. According to these figures it would still necessitate our having, in quite a number of instances, in the neighborhood of only 600 cubic feet of air space per patient for those sleeping in dormitories, and in some instances even less than this. Should this new set of figures be adopted, giving us a somewhat larger amount of air space, it would result in reducing our total capacity of the institution, as given at present, by about 375.

Owing to the small amount of money that could be apportioned during the past year, many matters in the way of furnishings, general repairs, etc., have been compelled to wait, and there has been too little advance in substantial improvements. Quite a number of floors are very badly worn and need renewing. The steel ceiling heretofore put in, should be extended and a variety of other matters in connection with the kitchen, bakery, store-room, etc., should be improved, including the purchase of some additional apparatus for the kitchen. Movable upper sash should be provided in most of the buildings. Scarcely a building is so provided at present, and in the crowded dormitories the ventilation could hardly be much worse in hot and muggy weather. The fire protection should be improved, even beyond what is now being provided in the new work. Tile floors should be put in some of the associate dining-rooms, and in one or two of the kitchens. The work of draining and asphaltting the basements should be continued. Better cupboards, for the proper storing of bread sent to the different buildings, should be provided; and, at one or two of the outside buildings, the pantries should either be increased in size or pantry facilities provided where there are none at present. Should this work be reached at any time, it would be desirable to extend the construction above the pantries proper so as to allow communication with the second floor in each of these buildings, from side to side through the building, or outside of the second story of the same.

This latter would be particularly useful because of its allowing an exit or escape for patients in case of fire. Steam tables for the dining-rooms in a number of the buildings should be provided, either arranged for heating food for the sick, or to keep food warm before it is served, when it is necessary to be done. While we asked for no money last year for increasing our electric lighting equipment (though an amount was put down under the heading of requirements for the previous year), I would like to draw attention to the fact that, having no reserve unit during a portion of the time, we are compelled to use both machines constantly. In case of a breakdown this would prove to be a very serious matter, and it is therefore extremely desirable that the additional equipment asked for under my predecessor, Dr. Mabon, should be provided as soon as possible.

We have enlarged the facilities of the machine shops during the past year considerably, but it is also necessary that the equipment of these shops be considerably increased in the future, in order to enable us to meet all the wants of the hospital, and from two to four thousand dollars would be required for this purpose.

The fire-escape at the storage building, leading from the sewing-room, should be inclosed and roofed over. Cases of attempted suicide have occurred in other institutions with which I have been connected, the patients trying to throw themselves headlong from stairways of similar construction. It is particularly desirable, also, to have this inclosed during the winter, because when wet it becomes slippery and dangerous for women to go up and down. To do this work in a proper way would probably cost from four to six hundred dollars. Screens are required for the windows of the shops and storage building, and a number of other buildings. A very satisfactory and inexpensive screen would answer the purpose, if made about two feet in height, to enable us to open the windows far enough at the top and bottom for ventilation. For this purpose about eight hundred dollars would be required. Iron racks for kitchen utensils, covers, and other miscellaneous purposes, are very much needed.

A portion of these matters can be attended to out of the maintenance account, or by moneys allowed us by the Commission out of the special fund; but it is very desirable for meeting these matters, that either a very much larger contingent fund should be allowed or we should have a general fund for miscellaneous purposes, of from one to two thousand dollars for the year, against which we could draw, subject to the approval of the Commission. For some reason, best known to themselves, the Commission has, for some time back, reduced our contingent fund to \$50 per month, and limiting the use of this very closely. I do not dispute the fact that, under ordinary circumstances, a hospital of this kind can get along under the system adopted, but can not feel that any great good is obtained by limiting the hospitals in this way. Somewhat greater liberty in this would result in a great deal of good, particularly in the way of allowing repairs to be attended to at a time when they were most needed, and, in that way saving a great deal of money for the hospital, because of the superintendent having funds upon which he could call on short notice. Under the present system of estimating every two months, and, having requests made in the interval discouraged by the Commission, there follows a tendency among the employes to allow matters to run over, and, unless very close watch is kept on the various departments, many minor matters will escape proper attention at the time when they most need it, from the fact that many subordinate employes become discouraged in not having these attended to when reported, consequently a tendency grows on their part not to report anything except such matters as are absolutely imperative, and they try to evade responsibility by claiming that it is impossible for them to keep things up when it is so difficult to get what they report attended to. While it has been my opinion that bi-monthly conferences of the superintendents with the Lunacy Commission are often enough, it is my belief that the monthly system of estimates was superior to the bi-monthly system.

The other matters that have been included previously with the needs of this hospital in years gone by are so evidently required

that I will not take your time to go into any further explanation than has heretofore been given, both by Dr. Mabon and myself, and while it is not my intention in the present report to try to elaborate again all of these matters, I bring most of them before you for your consideration, for the reason that they are so necessary I feel that every effort should be made to gradually acquire the facilities desired for the protection of the hospital.

The following is a statement of such matters as I have referred to above, including items given in previous reports, and that are most urgently needed by the hospital:

	Money needed for repairs and betterments.
General bathroom for south wing and storage for clothes, etc.	\$15,000 00
Fruit trees	300 00
Fencing	2,000 00
Automatic boiler stokers, not including those for main building, pumphouse, etc.....	12,000 00
For miscellaneous purposes in the way of betterments	6,000 00
Machine shop equipment	2,000 00
Inclosing fire-escape on storage building.....	800 00
Changing to lake water supply and sewage system or well water supply by compressed air.....	25,000 00
Hospital for acute cases.....	25,000 00
Cold storage	14,500 00
Improvements in heating apparatus.....	20,000 00
Electric light equipment	16,000 00
Plumbing	15,000 00
Piazzas	5,000 00
New floors	6,500 00
Sidewalks	1,500 00
Steel ceiling	5,000 00
Furniture	3,000 00
For miscellaneous purposes in the way of betterments	8,000 00
Tiling	5,000 00

	Money needed for repairs and betterments.
Pathological laboratory	\$2,500 00
Farm implements and tile.....	750 00
Silo	3,500 00
Road machine	3,500 00
Milkroom and Pasteurizing apparatus.....	1,500 00
Enlarging passageways between detached buildings,	10,000 00
Barge for transporting hospital supplies, sand, etc..	900 00
Fire alarm	2,500 00
Changing bathrooms to spray baths.....	2,500 00
Additional stokers for boiler-rooms.....	5,000 00

MEDICAL STAFF.

The following changes in the medical staff have taken place in the past year: Drs. George O'Hanlon, Samuel F. Mullen and Godfrey Pittis, resigned from the service of the hospital, and Drs. Donald L. Ross, of North Tonawanda, N. Y., and Anton R. Schier, of Arthursburg, N. Y., have been added to the staff.

EMPLOYES.

A good many changes have taken place during the past year among the employes of the institution, though I am glad to state that the number of dismissals has been relatively very small.

On May 27th occurred the death of George Farley, for twenty-five years a faithful employe of the institution.

I wish to record my personal appreciation of the faithful services rendered during the past year by each of the officers and employes of the institution.

ACKNOWLEDGMENTS.

Religious services of visitation have been performed during the past year, and our thanks for this work are due to Rev. H. A. Porter, Rev. C. W. McNish, Rev. J. H. Rogers, Rev. T. J. O'Connell, Rev. Joseph W. Hendrick and the Rev. J. A. Kennedy, all of Ovid, N. Y.

Contributions of reading material have been received as follows:

- Attica News, Attica, N. Y., 1 copy.
- Auburn Deutsch Zeitung, Auburn, N. Y., 2 copies.
- Addison Advertiser, Addison, N. Y., 2 copies.
- Addison Record, Addison, N. Y., 1 copy.
- Batavia Daily News, Batavia, N. Y., 1 copy.
- Castilian, Castile, N. Y., 1 copy.
- Cayuga Chief, Weedsport, N. Y., 1 copy.
- Cohocton Times, Cohocton, N. Y., 1 copy.
- Caledonia Advertiser, Caledonia, N. Y., 1 copy.
- Cuba Patriot, Cuba, N. Y., 1 copy.
- Clyde Times, Clyde, N. Y., 1 copy.
- Deaf-Mutes' Journal, New York city, 1 copy.
- Dansville Advertiser, Dansville, N. Y., 1 copy.
- Dryden Herald, Dryden, N. Y., 1 copy.
- Farmer Review, Farmer, N. Y., 2 copies.
- Geneva Advertiser, Geneva, N. Y., 1 copy.
- Geneva Gazette, Geneva, N. Y., 1 copy.
- Groton and Lansing Journal, Groton, N. Y., 1 copy.
- Hammondsport Herald, Hammondsport, N. Y., 1 copy.
- Hornellsville Times, Hornellsville, N. Y., 1 copy.
- Hornellsville Weekly Tribune, Hornellsville, N. Y., 1 copy.
- Hornellsville Evening Tribune (daily), Hornellsville, N. Y., 1 copy.
- Ithaca Daily News, Ithaca, N. Y., three copies.
- Livingston Republican, Geneseo, N. Y., 1 copy.
- Lake Shore News, Wolcott, N. Y., 1 copy.
- Le Roy Gazette, Le Roy, N. Y., 1 copy.
- Montour Falls Free Press, Montour Falls, N. Y., 1 copy.
- Mt. Morris Enterprise, Mt. Morris, N. Y., 1 copy.
- Orleans American, Albion, N. Y., 1 copy.
- Oakfield Reporter, Oakfield, N. Y., 1 copy.
- Ovid Gazette, Ovid, N. Y., 2 copies.
- Ovid Independent, Ovid, N. Y., 2 copies.
- Perry Herald and News, Perry, N. Y., 2 copies.

Penn Yan Express, Penn Yan, N. Y., 1 copy.
Penn Yan Democrat, Penn Yan, N. Y., 1 copy.
Rochester Morning Herald (daily), Rochester, N. Y., 2 copies.
Spirit of the Times, Batavia, N. Y., 1 copy.
Southern Steuben Republican, Woodhull, N. Y., 1 copy.
Seneca Falls Reveille, Seneca Falls, N. Y., 2 copies.
Seneca County Journal, Seneca Falls, N. Y., 1 copy.
Seneca County Courier, Seneca Falls, N. Y., 1 copy.
Steuben Courier, Bath, N. Y., 1 copy.
Steuben Farmers' Advocate, Bath, N. Y., 1 copy.
Seneca County News Letter, Geneva, N. Y., 2 copies.
Seneca County News, Waterloo, N. Y., 1 copy.
Union Springs Advertiser, Union Springs, N. Y., 1 copy.
Union Advertiser, Wayland, N. Y., 1 copy.
Victor Herald, Victor, N. Y., 1 copy.
Waterloo Observer, Waterloo, N. Y., 1 copy.
Weekly News and Democrat, Auburn, N. Y., 1 copy.
Watkins Express, Watkins, N. Y., 1 copy.
Watkins Democrat, Watkins, N. Y., 1 copy.
Yates County Chronicle, Penn Yan, N. Y., 2 copies.

OFFICIAL VISITS.

The members of your board and the members of the State Commission in Lunacy have, as usual, visited the hospital from time to time during the year. Among the visitors at the hospital we note the following:

Hon. John Raines, Canandaigua, N. Y.
Prof. Law, Cornell University, Ithaca, N. Y.
Dr. Fish, Ithaca, N. Y.
Prof. Atwater, Wesleyan University.
Hon. John E. Richardson, Waterloo, N. Y.
Hon. Edwin C. Stewart, Ithaca, N. Y.
Dr. Hart, Colorado.
Hon. W. L. Sweet, Waterloo, N. Y.
Dr. Stroud, Cornell University, Ithaca, N. Y.

Judge Dwight, Auburn, N. Y.

Dr. Eddy, Geneva, N. Y.

Dr. E. R. Bishop, Geneva, N. Y.

Concluding, I beg to express my gratification at the kind co-operation that I have received at the hands of your board during the last year.

Respectfully,

WM. AUSTIN MACY,

Medical Superintendent.

REPORT OF THE TREASURER.

To the Managers of Willard State Hospital:

The treasurer of the Willard State Hospital respectfully submits the following statement of his receipts and payments for the year ending September 30, 1898:

Receipts.

Balance on hand September 30, 1897, general fund..	\$2,560 60
Balance on hand September 30, 1897, manufacturing department	62 00
Received from State Comptroller, general fund.....	334,542 05
Received from State Comptroller, special funds....	15,220 58
Received from State Comptroller, employment of clergymen	1,000 00
Received from various hospitals, manufacturing department	282 53
Received from reimbursing patients.....	18,949 55
Received from private patients.....	866 43
Received from M. J. Gilbert, steward, sale of uniforms	358 90
Received from M. J. Gilbert, steward, sale of live stock	595 50
Received from M. J. Gilbert, steward, rents.....	67 80
Received from M. J. Gilbert, steward, remittance overpayment	33 30
Received from M. J. Gilbert, steward, sundries....	854 16
Received from interest on deposits.....	256 77
Total	<u>\$375,650 17</u>

Expenditures.

Vouchers paid from general fund.....	\$354,256 84
Vouchers paid from special funds.....	15,220 58
Vouchers paid from manufacturing department....	466 24

WILLARD STATE HOSPITAL.

31

Vouchers paid from employment of clergymen fund,	\$1,000 00
Balance cash on hand September 30, 1898.....	4,706 51
<hr/>	
Total	\$375,650 17
<hr/>	

Balances.

Balance on hand, general fund.....	\$4,828 22
Balance overpaid, manufacturing department.....	121 71
<hr/>	
Balance cash on hand.....	\$4,706 51
<hr/>	

Respectfully submitted,

J. B. THOMAS,

*Treasurer.*OVID, N. Y., *October* 21, 1898.

REPORT OF THE STEWARD.

To the Medical Superintendent:

The following report of the farm and garden products, stock on hand, articles manufactured, and the classification and summary of expenditures for maintenance, for the year ending September 30, 1898, is respectfully submitted:

FARM PRODUCTS.

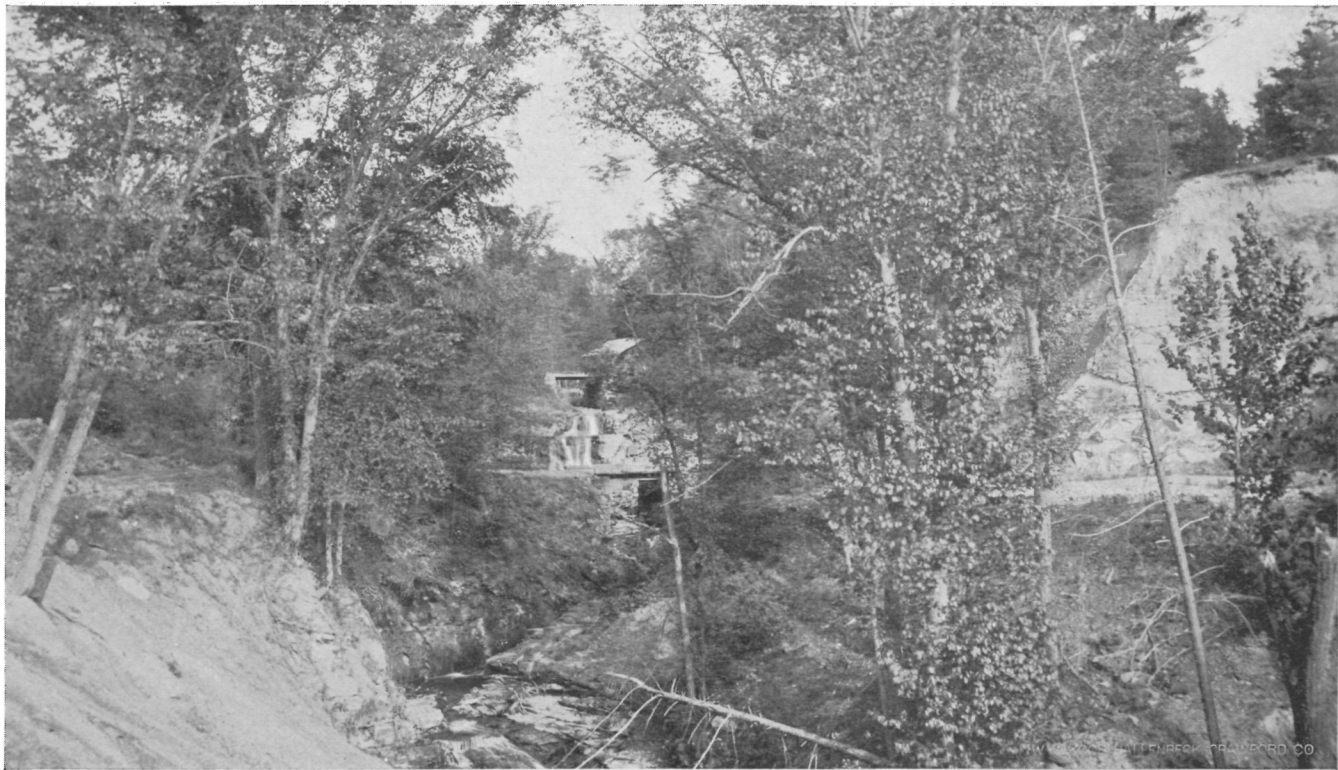
Apples, bushels	200
Buckwheat, bushels	300
Beef dressed, pounds	5,832
Corn, ears, bushels	3,000
Corn, sweet, bushels	890
Corn fodder, tons, estimated	100
Cornstalks, tons, estimated	60
Chickens, dressed, pounds	3,716
Ducks, pounds	192
Eggs, dozens	1,547
Geese, pounds	360
Grapes, pounds	5,398
Hides, pounds	1,151
Hay, tons	350
Mangel-wurzel, bushels	15,000
Milk, gallons	100,958
Oats, bushels	4,200
Oat straw, tons, estimated	75
Potatoes, bushels, estimated	8,000
Pork, pounds	54,117
Pears, bushels	28
Turkeys, dressed, pounds	495
Turnips, bushels	1,000
Wheat, bushels, estimated	2,300
Wheat straw, tons, estimated	95



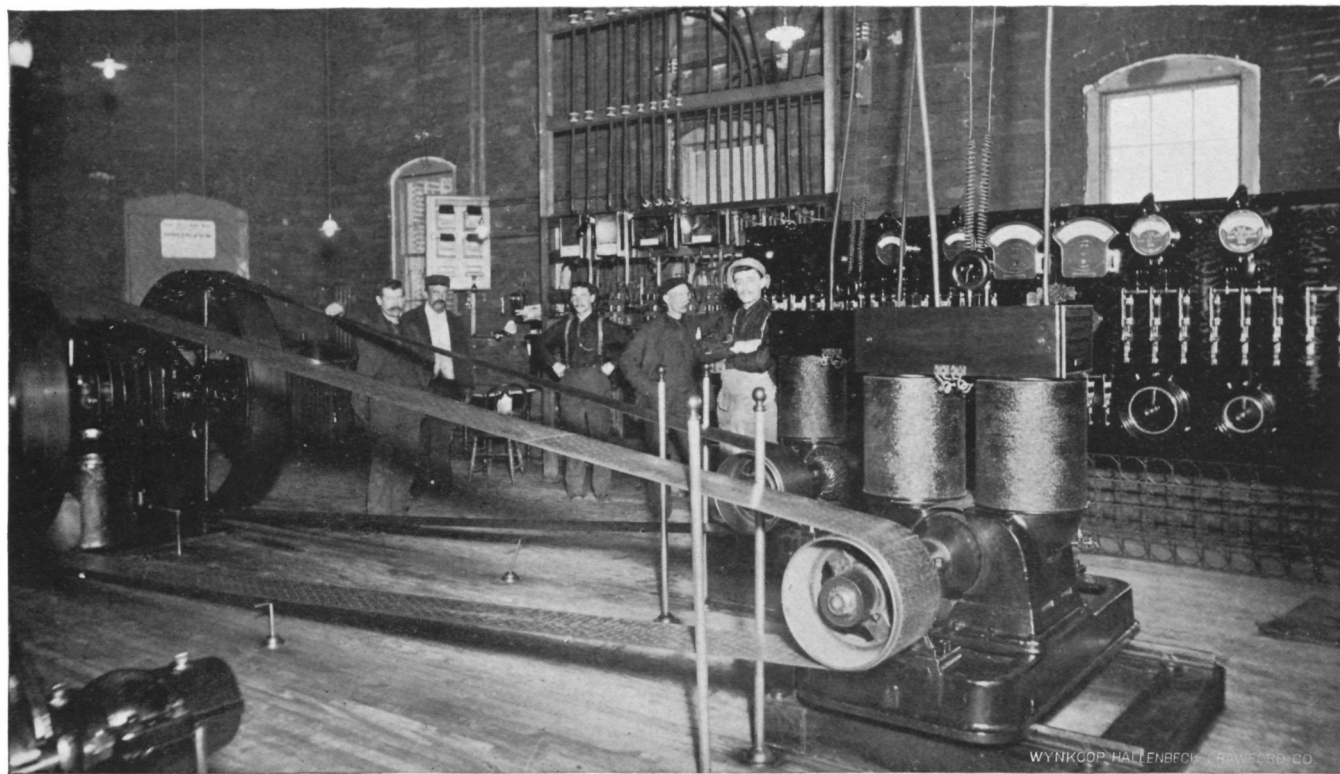
WILLARD STATE HOSPITAL.—VIEW OF SENECA LAKE SOUTH OF MAIN BUILDING.



WILLARD STATE HOSPITAL.—AFTERNOON VIEW FROM FRONT OF MAIN BUILDING.



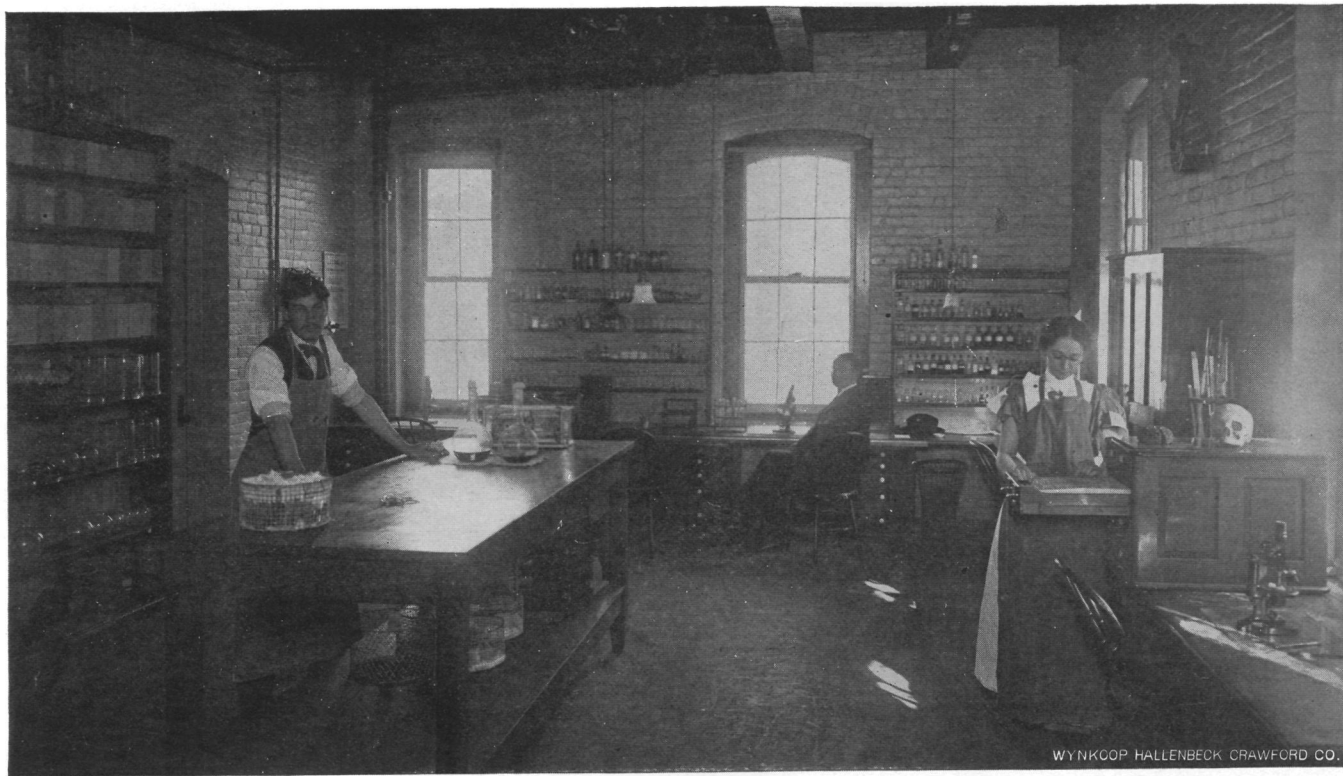
WILLARD STATE HOSPITAL.—A GLIMPSE OF THE RAVINE.



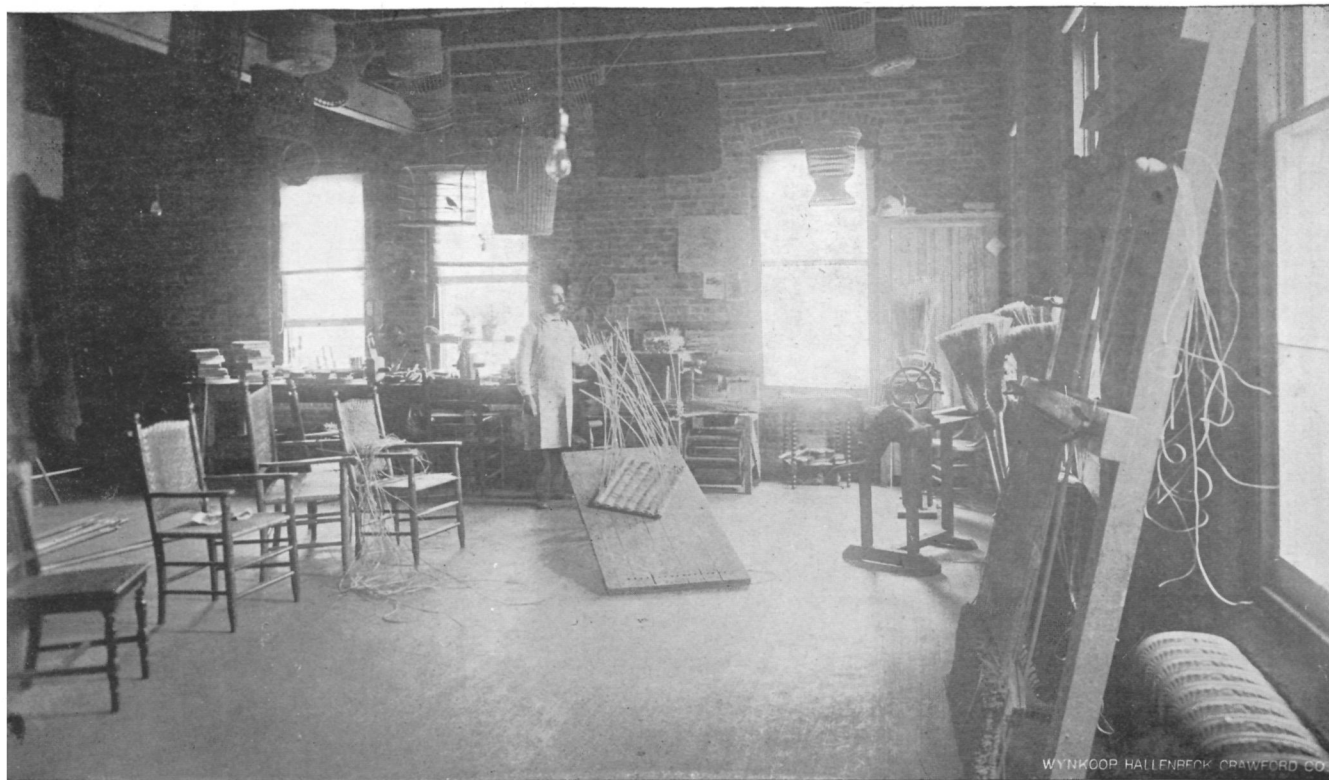
WILLARD STATE HOSPITAL.—ELECTRIC LIGHT PLANT.



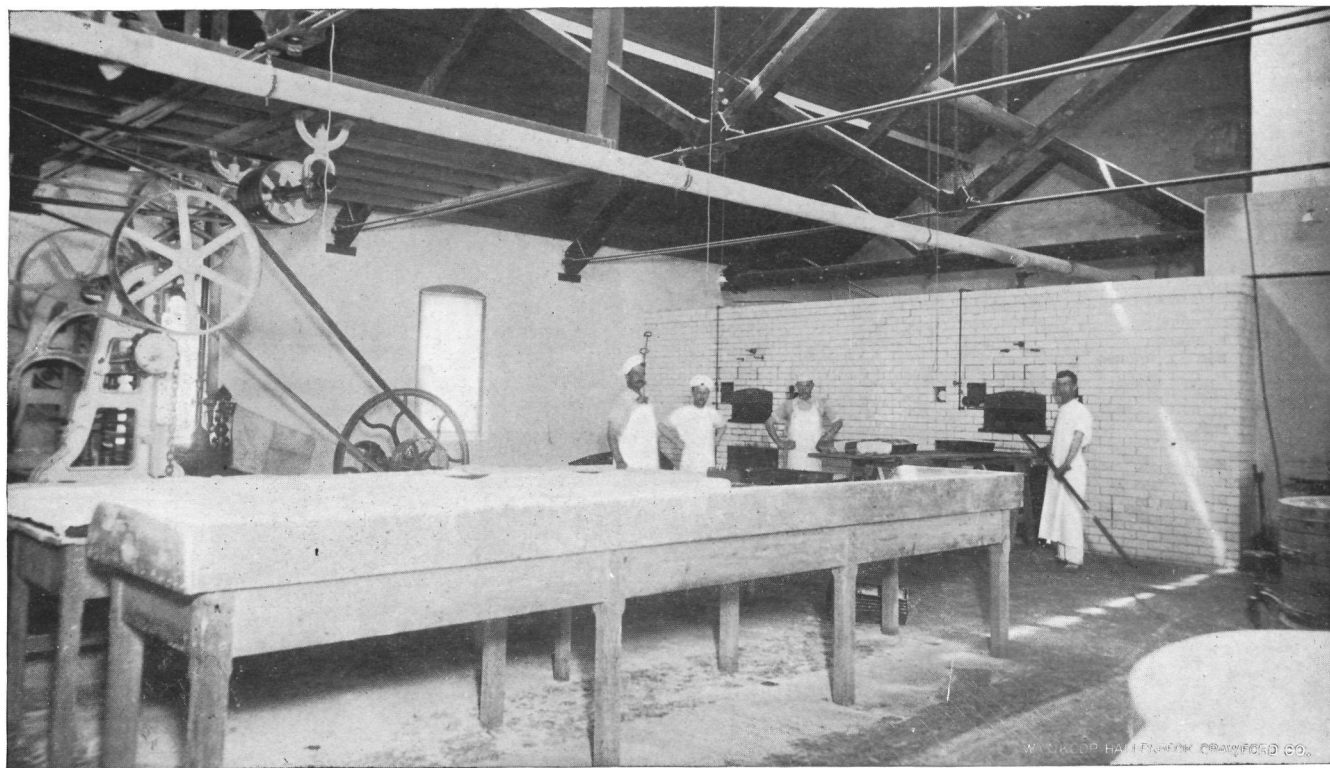
WILLARD STATE HOSPITAL.—STOREROOM.



WILLARD STATE HOSPITAL.—INTERIOR OF LABORATORY.



WILLARD STATE HOSPITAL.—INTERIOR OF BRUSH, BROOM AND BASKET MAKING ROOM,



WILLARD STATE HOSPITAL.—INTERIOR OF BAKERY.

GARDEN PRODUCTS.

Asparagus, bushels	62
Beans, string, bushels	357
Beans, Lima, bushels, estimated.....	97
Beets, bushels, estimated	2,300
Cabbage, heads	46,000
Celery, heads	10,000
Carrots, bushels, estimated	300
Cucumbers, bushels	925
Corn, sweet, bushels	371
Eggplant, bushels	24
Lettuce, bushels	800
Marjoram, bunches	60
Onions, green, bushels	744
Onions, bushels, estimated	500
Peas, bushels	123
Potatoes, bushels, estimated	300
Peppers, bushels	34
Radishes, bushels	124
Rhubarb, barrels	331
Rutabagas, bushels, estimated	1,000
Squash, summer, bushels	504
Squash, Hubbard, bushels, estimated	300
Swiss chard, bushels	478
Spinach, bushels	680
Sage, bunches	300
Savory, bunches	100
Tomatoes, bushels, estimated	2,800
Turnips, bushels, estimated	1,300
Thyme, bunches	100

FARM STOCK.

Horses, good	31
Horses, old	8
Mules	2

Cows	140
Heifers, 2 years old.....	17
Heifers, 1 year old	20
Calves	26
Bulls	6
Boars	4
Hogs, fat	121
Sows, for breeding	55
Shoats	138
Pigs	150
Chickens	400
Geese	10
Ducks	32
Turkeys	70

ARTICLES MADE IN MATRON'S DEPARTMENT.

Aprons, men's, unbleached	1,039
Aprons, patients', bleached	3,811
Bureau covers	216
Bedspreads	12
Bed protectors	44
Bibs	102
Blankets, quilted	39
Caps, men's	95
Caps, attendants'	262
Chemises	1,765
Curtains, Holland	324
Curtains, cheese cloth	48
Clothes bags	16
Dresses, gingham and calico.....	3,260
Dresses, quilted	96
Dresses, worsted	80
Drawers, cotton	550
Drawers, canton flannel	1,114
Hose, knit, pairs	91

WILLARD STATE HOSPITAL.

35

Laundry bags	205
Mattress ticks	416
Napkins, hemmed	84
Night gowns	293
Pillow cases	1,987
Pillow ticks	84
Pillow shams	67
Skirts, C. F.	2,313
Skirts, Balmoral	92
Sheets	4,245
Sheets, canvas	6
Table cloths	659
Table spreads, red	31
Table mats	45
Towels, State Hospital	13,677
Towels, dish	1,655
Waists, Canton flannel	902
Shrouds	72
Burial shirts	46
Burial drawers	39

GARMENTS MADE IN TAILORING DEPARTMENT.

Coats	2,012
Vests	1,558
Pants	2,979
Overcoats	168
Overalls	636
Overshirts	285
Men's suits, straight	91
Undershirts	6
Drawers	6
Men's caps	220
Suspenders, pairs	238
Butcher's frocks	2

ARTICLES MADE IN SHOESHOP.

Shoes, men's working, pairs.....	579
Shoes, men's fine, pairs.....	40
Shoes, women's, pairs.....	2
Slippers, men's, pairs.....	216
Mattresses, new	30
Mattresses, remade	700
Pillows, remade	556
Couches, repaired	6
Chairs, repaired	9
Settees, repaired	2
Wagon cushions, made.....	4
Awnings, new	29
Canvas stretcher for wagon.....	1
Pads and straps, lineman.....	2
Clothes sacks for laundry.....	52
Rubber aprons for wagons.....	7
Break blocks	6
Harness, single work.....	1
Horse collars, faced.....	4
Sweat pads, for horse collars.....	8
Horse halters	10
Straps, miscellaneous	148

And all repair of harness, boots, shoes and slippers.

ARTICLES MADE IN TINSHOP.

Bands for coffee urns.....	6
Boxes, tin	2
Basins, 2-quart	24
Bucket, swill	1
Buckets, water, covered.....	8
Cake box, covered.....	1
Coffee sprays	2
Coffee pots	48
Cups , , ,	120

Cans, milk, 40-quart.....	10
Coal hods	64
Clothes pounder	1
Covers, perforated	3
Cake tins	18
Cutters, vegetable	2
Cutters, sandwich	3
Diet tins	18
Diet tins, special.....	3
Dripping pans	16
Dippers, large	4
Dippers, 1-quart	48
Dippers, 1-pint	48
Dippers, 2-quart	12
Elbow	1
Farina kettles	2
Funnels	8
Feeding measures, 4-quart	2
Feeding measures, 6-quart.....	1
Food cars repaired.....	.....
Filter for coffee urn.....	1
Gutter tin, feet, 14-inch.....	42
Gutter tin, feet, 20-inch.....	50
Lining for stone water coolers.....	4
Mess tins	6
Milk strainers	2
Marking cans	24
Pails, swill	3
Pails, 8-quart	1
Pails, 12-quart	84
Pans, 4-quart, sauce.....	6
Pans, 10-quart	36
Pans, 21-quart	72
Pans, stew	2
Rods, for awning.....	46
Steamers	2

Sprinkler, 1-gallon.....	1
Springler, 1-quart	2
Sieve, fine	1
Strainers, small	2
Strainer for spring pipe.....	1
Shakers, Paris green.....	6
Water bath for laboratory.....	1
Zinc .....	.....

All repairs of tinware.

ARTICLES MADE IN BROOMSHOP.

Brooms, house, dozen.....	108
Brooms, stable, single.....	18
Baskets, waste, dozen.....	3
Baskets, square, large, single.....	9
Chair bottoms, new, dozen.....	10
Mats, doors, dozen.....	3
Polishers, floor, dozen.....	3½

MAINTENANCE—PER CAPITA COST PER WEEK.

	Total cost.	Per capita.
Officers' salaries	\$21,664 47	\$0.1846
Wages	141,800 29	1.2002
Provisions and stores.....	109,987 24	.9375
Ordinary repairs	6,882 69	.0586
Farm and grounds.....	5,019 45	.0427
Clothing	22,164 75	.1889
Furniture and bedding.....	6,715 06	.0572
Books and stationery.....	2,503 44	.0213
Fuel and light.....	21,978 84	.1873
Medical supplies	2,451 50	.0209
Miscellaneous expenses	9,663 68	.0823
Transportation of patients.....	3,425 43	.0292
Total	\$354,256 84	\$3.0197

STATISTICAL TABLES

TABLE No. 1.

Showing Movement of Population for the Year Ending September 30,
1898.

	Men.	Women.	Total.
Remaining October 1, 1897	1, 106	1, 153	2, 259
Admitted during year ending Sept. 30, 1898:			
On original commitments:			
From residences	141	119	260
By transfers from county houses	8	6	14
By transfers from other institutions for insane.	128	126	254
Total number under treatment during year.	1, 383	1, 404	2, 787
Daily average population	1, 115	1, 146	2, 261
Capacity of institution	1, 104	1, 166	2, 270
Discharged during the year:			
As recovered	33	28	61
As improved	35	39	74
As unimproved	129	133	262
As not insane	2	.....	2
Died	69	63	132
Whole number discharged during the year.	268	263	531
Remaining October 1, 1898	1, 115	1, 141	2, 256

TABLE No. 2.

October 1, 1897, to September 30, 1898.

Date of opening	1869
Total acreage of grounds and buildings	1,107
Value of real estate, including buildings.....	\$1,466,205 34
Value of personal property	214,859 52
Acreage under cultivation	750

Receipts during the year, maintenance fund:

Balance on hand October 1, 1897	\$2,560 60
From State Treasury for maintenance on estimates 1 to 12 inclusive.....	334,542 05
From private patients.....	866 43
From reimbursing patients.....	18,949 55
From all other sources.....	2,166 43

Total receipts for maintenance \$359,085 06

Total receipts from State Commission in Lunacy
for extraordinary improvements..... 15,220 58

Total receipts from manufacturing fund..... 344 53

Disbursements during year for maintenance:

Estimate No. 1. For officers' salaries	\$21,664 47
Estimate No. 2. For wages	141,800 29
Estimate No. 3. For provisions and stores.....	109,987 24
Estimate No. 4. For ordinary repairs	6,882 69
Estimate No. 5. For farm and grounds	5,019 45
Estimate No. 6. For clothing	22,164 75
Estimate No. 7. For furniture and bedding	6,715 06
Estimate No. 8. For books and stationery.	2,503 44
Estimate No. 9. For fuel and light.. ..	21,978 84
Estimate No. 10. For medical supplies.....	2,451 50
Estimate No. 11. For miscellaneous expenses....	9,663 68
Estimate No. 12. For transportation	3,425 43

Total disbursements, estimates 1 to 12 inclusive \$354,256 84

Table No. 2—(Concluded).

Total disbursements during year for extraordinary improvements under apportionments by State Commission in Lunacy.....	\$15,220 58
Total disbursements during year, manufacturing fund.....	466 24

Balances October 1, 1898:

General maintenance fund.....	\$4,828 22
Manufacturing fund overpaid	121 71

Weekly per capita cost on daily average number of patients, estimates 1 to 12 inclusive.....	\$3.019
--	---------

Maximum rate of wages paid attendants:

Men	\$33 00
Women	28 00

Minimum rate of wages paid attendants:

Men	20 00
Women	14 00

Proportion of day attendants to average daily population	1 to 11.02
--	------------

Proportion of night attendants to average daily population	1 to 72.58
--	------------

Percentage of daily patient population engaged in some kind of useful occupation	50.36
--	-------

Estimated value of farm and garden products during year.....	\$33,788 21
--	-------------

Estimated value of articles made or manufactured by patients during year.....	24,112 72
---	-----------

Employment of clergyman :

Received from State Comptroller	\$1,000
Total disbursements.....	1,000

TABLE No. 3.

Showing the Assigned Causes of Insanity in Cases Admitted During the Current Year.

CAUSES.	YEAR ENDING SEPTEMBER 30, 1898.			INHERITED PREDISPOSITION.			Unascertained.
	Men.	Women.	Total.	Men.	Women.	Total.	
Moral :							
Adverse conditions (such as loss of friends, business troubles, etc.).....	15	28	43	6	11	17	3
Mental strain, worry and overwork (not included in above).	12	13	25	....	7	7	2
Religious excitement.	3	4	7	....	....	....	....
Love affairs (includ- ing seduction) ....	....	4	4	....	1	1	....
Freight and nervous shock .....	....	1	1	....	1	1	....
Physical :							
Intemperance	41	11	52	13	2	15	10
Sexual excess	5	1	6	2	....	2	1
Venereal diseases ...	2	3	5	1	1	2	....
Masturbation	7	1	8	3	1	4	3
Sunstroke	6	1	7	2	....	2	....
Accident or injury ..	8	5	13	....	2	2	1
Pregnancy .....	....	3	3	....	....	....	....
Parturition and puer- perium .....	....	2	2	....	....	....	....
Lactation .....	....	1	1	....	1	1	....
Change of life .....	....	10	10	....	3	3	1
Fevers	2	....	2	1	....	1	....
Privation and over- work .....	....	1	1	....	....	....	....
Epilepsy	6	4	10	2	1	3	....
Diseases of skull and brain .....	....	2	2	....	1	1	1
Old age	12	2	14	3	....	3	1
Epidemic influenza ..	1	2	3	....	1	1	....
Abuses of drugs	5	3	8	2	1	3	2
All other bodily dis- orders and ill health	3	9	12	1	2	3	1
Heredity	6	25	31	6	25	31	....
Congenital defect	2	1	3	1	....	1	....
Unascertained	139	114	253	....	6	6	218
Not insane	2	....	2	....	....	....	....
Total	277	251	528	43	67	110	244

TABLE No. 4.

Showing Forms of Insanity in Those Admitted, Recovered and Died
During the Year Ending September 30, 1898, and Since October 1,
1888.

FORM.	YEAR ENDING SEPTEMBER 30, 1898.			SINCE OCTOBER 1, 1888.		
	Admitted.	Recovered.	Died.	Admitted.	Recovered.	Died.
Mania, acute delirious	2	.....	2	2	.....	2
Mania, acute	46	23	9	472	192	57
Mania, recurrent.....	3	1	1	61	21	11
Mania, chronic.....	77	1	15	497	23	226
Melancholia, acute	76	34	12	651	214	140
Melancholia, chronic	68	2	18	419	25	98
Alternating (circular) insanity.....	.....	.....	.....	2	.....	.....
General paralysis	21	.....	8	115	.....	92
Dementia, principal	1	.....	.....	3	.....	.....
Dementia, terminal.....	220	.....	56	1,511	.....	764
Epilepsy with insanity.....	8	.....	10	168	.....	141
Imbecility with maniacal at- tacks	5	.....	1	88	.....	14
Idiocy	1	.....	.....	37	.....	15
Not insane*.....	.....	.....	.....	10	.....	.....
Total	528	61	132	4,036	475	1560

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 5—(Continued).

CURABLE CONDITIONS.		LENGTH OF INTERVAL OF COMPLETE IMMUNITY FROM SYMPTOMS OF INSANITY IN CASES PREVIOUSLY DISCHARGED RECOVERED—NOW READMITTED.																	
		UNDER 3 MONTHS		FROM 3 MONTHS TO 1 YEAR.		FROM 1 TO 2 YEARS		FROM 2 TO 3 YEARS.		FROM 3 TO 4 YEARS.		FROM 4 TO 5 YEARS.		BETWEEN 5 AND 10 YEARS.		AVERAGE LENGTH OF IMMUNITY.			
		Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	MEN.		WOMEN.	
																Years.	Months.	Years.	Months.
Melancolia in acute forms.	First ad- mission.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Second ad- mission.	1	...	...	1	...	...	...	3	1	1	...	...	...	...	1	9	2	2
	Third ad- mission.	...	...	...	2	...	1	...	...	...	...	...	...	...	...	...	...	...	9
Mania in acute forms.	First ad- mission.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Second ad- mission.	1	...	...	3	...	1	...	1	...	1	...	1	...	...	...	1½	1	9
	Third ad- mission.	...	1	2	...	1	1	...	...	...	...	...	...	...	...	1	1¾	1	3
All other cur- able forms.	First ad- mission.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Second ad- mission.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Third ad- mission.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE No. 6.

Showing the Duration of Insanity Previous to Admission, and the Period Under Treatment of Patients Discharged Recovered During the Current Year and Since October 1, 1888.

	YEAR ENDING SEPTEMBER 30, 1898.						SINCE OCTOBER 1, 1888.					
	DURATION PREVIOUS TO ADMISSION.			PERIOD UNDER TREATMENT.			DURATION PREVIOUS TO ADMISSION.			PERIOD UNDER TREATMENT.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
Under one month.....	12	7	19	.....	.....	.....	85	67	152	2	.....	2
One to three months.....	9	4	13	5	3	8	52	61	113	40	16	56
Three to six months.....	6	10	16	15	11	26	38	43	81	80	60	140
Six to nine months.....	1	1	2	5	7	12	13	12	25	42	46	88
Nine months to one year....	1	1	2	4	6	10	7	11	18	29	39	68
One year to eighteen months..	1	1	2	3	1	4	10	5	15	32	32	64
Eighteen months to two years .....	.....	2	2	1	.....	1	9	8	17	6	10	16
Two to three years	2	.....	2	.....	.....	.....	9	8	17	8	18	26
Three to four years.....	.....	.....	.....	.....	.....	.....	3	2	5	2	6	8
Four to five years.....	.....	1	1	.....	.....	.....	.....	1	1	3	1	4
Five to ten years.....	.....	1	1	.....	.....	.....	4	6	10	1	1	2
Ten to twenty years.....	1	.....	1	.....	.....	.....	2	2	4	.....	1	1
Not insane* .....	.....	.....	.....	.....	.....	.....	2	.....	2	2	.....	2
Unascertained .....	.....	.....	.....	.....	.....	.....	13	4	17	.....	.....	.....
Total	33	28	61	33	28	61	247	230	477	247	230	477

* Includes cases of alcoholism, opium habit, etc.

TABLE No. 7.

Showing the Causes of Death of Patients who Died During the Current
Year and Since October 1, 1888.

CAUSE OF DEATH.	YEAR ENDING SEP- TEMBER 30, 1888.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Specific infectious diseases:						
Typhoid fever.....	1	....	1	3	4	7
Influenza.....	....	....	..	1	5	6
Erysipelas.....	....	2	2	4	9	13
Septicemia and pyemia.....	....	2	2	7	4	11
Dysentery.....	....	....	....	8	7	15
Tuberculosis.....	12	18	30	130	209	339
Constitutional diseases:						
Diabetes mellitus and diabetes insipidus.....	....	....	....	1	1	2
Diseases of the digestive system:						
Mouth, salivary glands, pharynx, tonsils and œsophagus.....	....	....	....	3	....	3
Diseases of the stomach.....	....	....	....	2	3	5
Diseases of the intestines.....	4	3	7	36	46	82
Diseases of the liver.....	1	....	1	3	2	5
Diseases of the peritoneum.....	2	1	3	8	7	15
Diseases of the respiratory system:						
Diseases of the bronchi.....	....	....	....	5	1	6
Diseases of the lungs.....	6	9	15	113	103	216
Diseases of the pleura.....	....	....	....	2	2	4
Diseases of the circulatory system:						
Diseases of the pericardium.....	....	....	....	2	1	3
Diseases of the heart.....	11	10	21	86	82	168
Arterio-sclerosis.....						
Aneurism.....	....	....	....	1	1	2
Diseases of the blood and ductless glands:						
Anemia, pernicious anemia and leukemia.....	....	1	1	....	1	1
Diseases of the genito-urinary sys- tem.....	13	10	23	57	37	94
Diseases of the nervous system:						
Diseases of the spinal cord.....	....	....	....	4	....	4
Diseases of the meninges.....	....	....	....	4	4	8
Organic diseases of the brain (tumor, abscess, embolism, throm- bosis, hemorrhage and other gross lesions).....	10	3	13	45	79	124
Epilepsy.....	2	1	3	43	36	79



WYNKOOP HALLENBECK CRAWFORD CO.

WILLARD STATE HOSPITAL.—INTERIOR OF SHOE-SHOP.

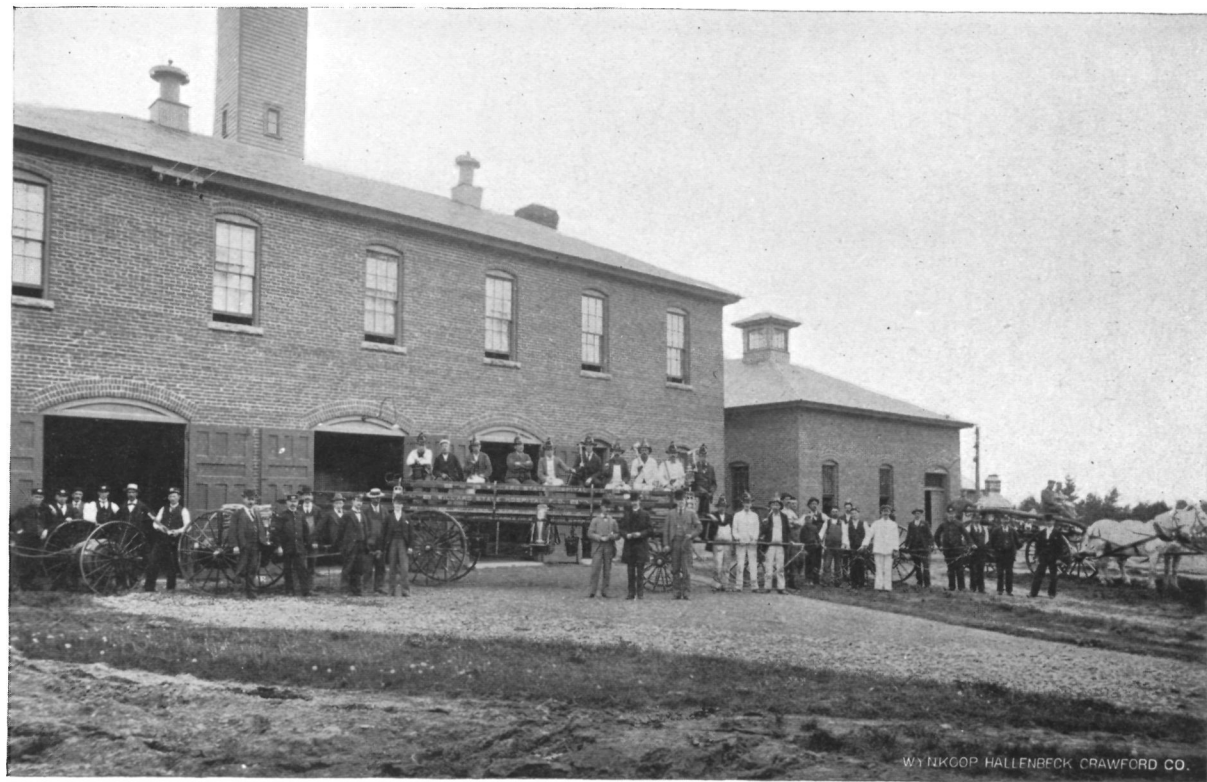


WILLARD STATE HOSPITAL.—FALL PLOWING.



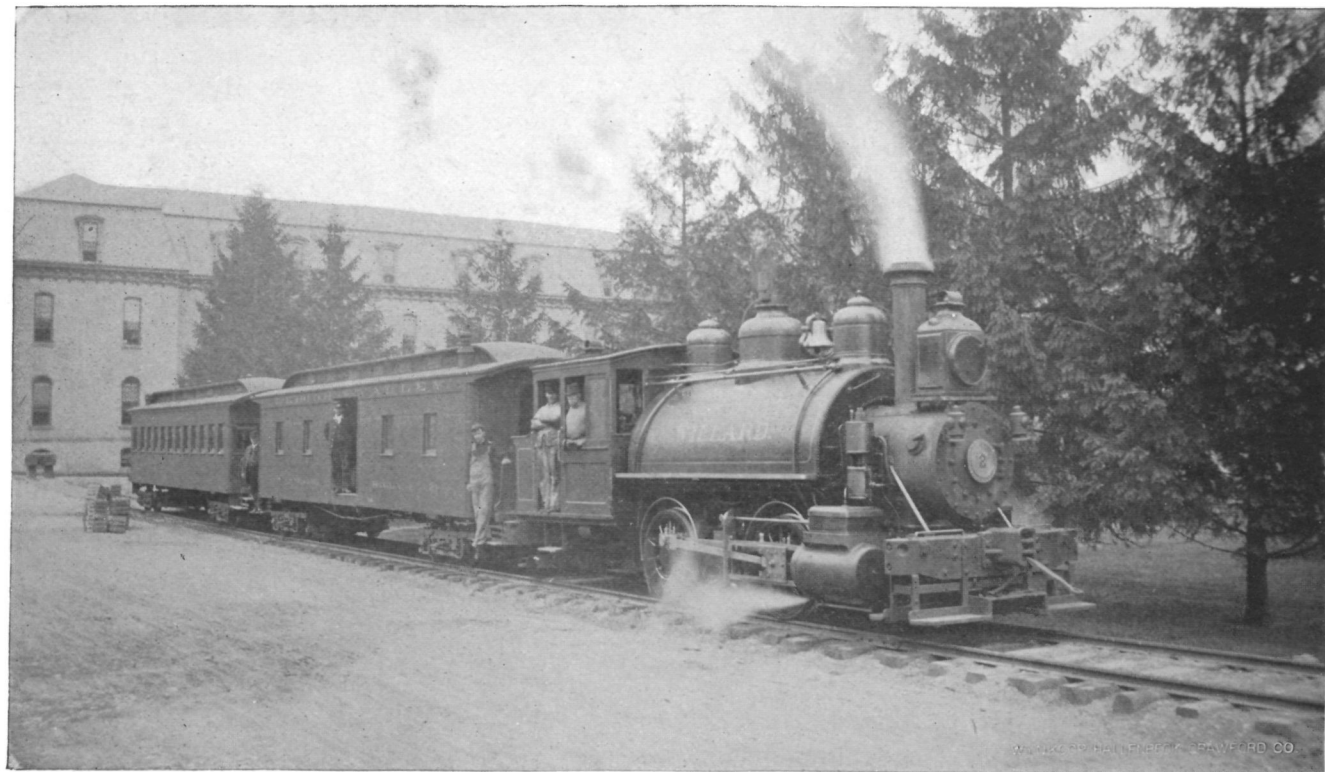
WYTKOP, HALL, CROCK, CRAWFORD CO.

WILLARD STATE HOSPITAL.—HARVESTING.



WYNKOOP HALLENBECK CRAWFORD CO.

WILLARD STATE HOSPITAL.—FIRE COMPANY AND FIRE ENGINE HOUSE.



WILLARD STATE HOSPITAL.—WILLARD BRANCH TRAIN STARTING FROM THE BUILDINGS.

Table No. 7—(Concluded).

CAUSE OF DEATH.	YEAR ENDING SEP- TEMBER 30, 1898.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Mental diseases:						
Exhaustion of acute mental dis- ease.....	....	1	1	64	70	134
Exhaustion of chronic mental disease.....						
General paralysis of the insane....	5	....	5	75	19	94
The intoxications; heat-stroke; obesity:						
Heat-stroke.....	....	1	1	....	1	1
Debility of old age.....	....	....	....	26	43	69
Accident.....	....	....	....	5	3	8
Suicide.....	1	....	1	3	2	5
Surgical and gynecological diseases and diseases of the skin.....	....	....	....	5	3	8
Malignant new growths or cancer.....	1	1	2	10	19	29
Total.....	69	63	132	756	804	1560

TABLE No. 8.

Showing Hereditary Tendency to Insanity in Patients Admitted During
the Current Year and Since October 1, 1888.

	YEAR ENDING SEPTEMBER 30, 1898.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Paternal branch.....	18	19	37	128	156	284
Maternal branch.....	14	23	37	178	216	394
Paternal and maternal branches.....	1	5	6	19	37	56
Collateral branches.....	18	15	33	197	204	401
No hereditary tendency..	98	77	175	685	534	1,219
Unascertained.....	128	112	240	801	881	1,682
Total.....	277	251	528	2,008	2,028	4,036

TABLE No. 9.

Showing Civil Condition of Patients Admitted During the Current Year and Since October 1, 1888.

CIVIL CONDITION.	YEAR ENDING SEPT. 30, 1898.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Single.....	160	117	277	1029	772	1801
Married	81	103	184	744	863	1607
Widowed	28	30	58	182	352	534
Divorced	8	.....	8	21	11	32
Unascertained .....	.....	1	1	32	30	62
Total	277	251	528	2,008	2,028	4,036

TABLE No. 10.

Showing Degree of Education of Patients Admitted During the Current Year and Since October 1, 1888.

DEGREE OF EDUCATION.	YEAR ENDING SEPT. 30, 1898.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Collegiate	6	1	7	28	11	39
Academic	13	15	28	123	110	233
Common school.....	143	135	278	1,192	1,131	2,323
Read and write	5	15	20	77	34	111
Read only.....	12	20	32	94	130	224
No education	16	19	35	143	138	281
Unascertained	82	46	128	351	474	825
Total	277	251	528	2,008	2,028	4,036

TABLE No. 11.

Showing the Duration of Insanity Previous to Admission, and the Period Under Treatment of Patients Who Died During the Current Year and Since October 1, 1888.

	YEAR ENDING SEPTEMBER 30, 1898.						SINCE OCTOBER 1, 1888.					
	DURATION PREVIOUS TO ADMISSION.			PERIOD UNDER TREATMENT.			DURATION PREVIOUS TO ADMISSION.			PERIOD UNDER TREATMENT.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
Under one month.....	7	12	19	9	5	14	45	40	85	58	40	98
One to three months.....	5	6	11	7	7	14	38	38	76	83	71	154
Three to six months.....	4	2	6	7	8	15	39	29	68	67	63	130
Six to nine months.....	9	2	11	3	1	4	46	26	72	34	51	85
Nine months to one year.....	3	3	6	2	2	4	22	20	42	40	35	75
One year to eighteen months.	5	4	9	7	7	14	42	37	79	62	59	121
Eighteen months to two years	1	1	2	.....	4	4	18	21	39	41	47	88
Two to three years.....	4	5	9	4	6	10	83	66	149	60	52	112
Three to four years.....	1	2	3	5	6	11	45	57	102	63	52	115
Four to six years.....	3	1	4	11	2	13	54	70	124	51	52	103
Six to ten years.....	5	4	9	2	1	3	64	85	149	65	67	132
Ten to twenty years.....	5	7	12	8	9	17	73	96	169	101	148	249
Twenty years and over.....	3	4	7	4	5	9	35	46	81	31	67	98
Unascertained.....	17	10	27	.....	.....	.....	152	173	325	.....	.....	.....
Total.....	69	63	132	69	63	132	756	804	1,560	756	804	1,560
Average duration of insane life (give years and tenths)				8.2	9 6	8.8	.....	.....	.....	8.8	11.6	10.3

TABLE No. 12.

Showing Ages of Those Admitted During the Current Year and Since October 1, 1888.

AGE.	YEAR ENDING SEPTEMBER 30, 1898.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
From 10 to 15 years	1	1	2	8	4	12
From 15 to 20 years	10	6	16	66	37	103
From 20 to 25 years	20	15	35	155	101	256
From 25 to 30 years	21	24	45	176	159	335
From 30 to 35 years	33	26	59	195	196	391
From 35 to 40 years	33	32	65	223	212	437
From 40 to 50 years	65	59	124	406	498	904
From 50 to 60 years	50	54	104	353	389	742
From 60 to 70 years	22	22	44	225	242	467
From 70 to 80 years	18	10	28	160	154	314
From 80 to 90 years	4	2	6	40	34	74
From 90 to 95 years .....	.....	.....	.....	1	.....	1
Total	227	251	528	2,008	2,028	4,036

TABLE No. 13.

Showing Ages of Those Discharged Recovered During the Current Year and Since October 1, 1888.

AGE.	YEAR ENDING SEPTEMBER 30, 1898.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
From 10 to 20 years	5	5	10	17	14	31
From 20 to 30 years	11	7	18	73	63	136
From 30 to 40 years	6	7	13	52	69	121
From 40 to 50 years	6	7	13	49	49	98
From 50 to 60 years	5	2	7	40	26	66
From 60 to 70 years .....	.....	.....	.....	12	6	18
From 70 to 80 years .....	.....	.....	.....	2	3	5
Total	33	28	61	245	230	475

TABLE No. 14.

Showing Ages of Patients Who Died During the Current Year and
Since October 1, 1888.

AGE.	YEAR ENDING SEPTEMBER 30, 1898.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
From 15 to 20 years.....				4	1	5
From 20 to 25 years.....	1		1	17	13	30
From 25 to 30 years.....	3	5	8	34	26	60
From 30 to 35 years	4	3	7	40	40	80
From 35 to 40 years.....	2	6	8	66	47	113
From 40 to 50 years.....	8	16	24	122	159	281
From 50 to 60 years.....	14	7	21	158	174	332
From 60 to 70 years.....	15	15	30	136	161	297
From 70 to 80 years.....	16	5	21	134	139	273
From 80 to 90 years.....	6	6	12	44	41	85
From 90 to 95 years.....				1	3	4
Total	69	63	132	756	804	1,560

TABLE No. 15.

Showing Alleged Duration of Insanity Previous to Admission of
Patients Admitted During the Year Ending September 30, 1898.

DURATION OF INSANITY.	Men.	Women.	Total.
Under one month.....	31	29	60
One to three months.....	25	21	46
Three to six months.....	11	18	29
Six to nine months.....	15	11	26
Nine months to one year.....	6	5	11
One year to eighteen months.....	17	12	29
Eighteen months to two years.....	2	1	3
Two to three years.....	18	14	32
Three to four years.....	4	14	18
Four to five years.....	11	5	16
Five to ten years.....	19	11	30
Ten to fifteen years.....	6	12	18
Fifteen to twenty years.....	4	2	6
Twenty to thirty years.....	7	4	11
Thirty years and upwards.....	4	3	7
Unascertained.....	97	89	186
Total.....	277	251	528

TABLE No. 16.

Showing Period of Residence in Asylum of Patients Remaining Under Treatment September 30, 1898.

PERIOD OF RESIDENCE.	Men.	Women.	Total.
Under one month	15	13	28
One to three months	23	16	39
Three to six months	21	20	41
Six to nine months	26	20	46
Nine months to one year	139	138	277
One year to eighteen months	41	43	84
Eighteen months to two years	30	34	64
Two to three years	145	183	328
Three to four years	39	72	111
Four to five years	87	70	157
Five to ten years	244	164	408
Ten to fifteen years	93	115	208
Fifteen to twenty years	74	69	143
Twenty to thirty years	138	184	322
Total	1,115	1,141	2,256

* Includes cases of alcoholism, morphia habit, etc.

TABLE No. 17.

Showing the Occupation of those Admitted During the Current Year and Since October 1, 1888.

OCCUPATION.	YEAR ENDING SEPTEMBER 30, 1898.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Professional: Clergy, military and naval officers, physicians, law- yers, architects, artists, authors, civil engineers, surveyors, &c	14	.....	14	51	5	56
Commercial: Bankers, merchants, ac- countants, clerks, sales- men, shopkeepers, shop- men, stenographers, typewriters, &c	30	.....	30	172	4	176

Table No. 17—(Concluded).

OCCUPATION.	YEAR ENDING SEPTEMBER 30, 1898.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Agricultural and pas- toral:						
Farmers, gardners, herds- men, &c.....	46	.....	46	556	2	558
Mechanics, at out- door vocations:						
Blacksmiths, carpenters, enginefitters, sawyers, painters, police, &c.....	50	.....	50	329	.....	329
Mechanics, &c., at sed- entary vocations:						
Bootmakers, bookbinders, compositors, weavers, tailors, bakers, &c.....	24	.....	24	122	.....	122
Domestic service:						
Waiters, cooks, servants, &c.....	6	79	85	24	1,103	1,127
Educational and high- er domestic duties:						
Governesses, teachers, stu- dents, housekeepers, nurses, &c.....	7	129	136	42	631	673
Commercial:						
Shopkeepers, saleswomen, stenographers, type- writers, &c. ....	.....	5	5	.....	9	9
Employed in seden- tary occupation:						
Tailoresses, seamstresses, bookbinders, factory workers, &c.....	1	13	14	11	94	105
Miners, seaman, &c.....	6	.....	6	25	.....	25
Prostitutes .....	.....	.....	.....	.....	1	1
Laborers	69	.....	69	528	.....	528
No occupation	17	21	38	113	131	244
Unascertained	7	4	11	35	48	83
Total	277	251	528	2,008	2,028	4,036

TABLE No. 18.

Showing the Nativity of Patients Admitted During the Current Year
and Since October 1, 1888.

NATIVITY.	YEAR ENDING SEPTEMBER 30, 1898.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Connecticut.....	4	.....	4	13	7	20
Florida.....	.....	.....	.....	.....	1	1
Georgia.....	.....	.....	.....	.....	1	1
Illinois.....	1	.....	1	5	2	7
Indiana.....	.....	.....	.....	1	4	5
Iowa.....	.....	.....	.....	1	.....	1
Kansas.....	.....	.....	.....	.....	2	2
Kentucky.....	.....	.....	.....	.....	3	3
Maine.....	1	.....	1	2	2	4
Maryland.....	.....	55	55	5	56	61
Massachusetts.....	1	.....	1	16	7	23
Michigan.....	.....	1	1	8	4	12
Minnesota.....	1	1	2	1	3	4
Mississippi.....	.....	.....	.....	1	.....	1
Missouri.....	.....	.....	.....	1	1	2
New Hampshire.....	.....	.....	.....	3	2	5
New Jersey.....	.....	1	1	9	7	16
New York.....	99	86	185	1,139	1,042	2,181
North Carolina.....	.....	.....	.....	2	2	4
Ohio.....	.....	.....	.....	4	1	5
Pennsylvania.....	4	3	7	52	34	86
Rhode Island.....	.....	.....	.....	1	.....	1
South Carolina.....	1	.....	1	1	1	2
Tennessee.....	1	.....	1	1	.....	1
Texas.....	.....	.....	.....	1	.....	1
Vermont.....	1	.....	1	8	6	14
Virginia.....	.....	1	1	1	4	5
Wisconsin.....	.....	.....	.....	2	5	7
Africa.....	1	.....	1	1	.....	1
Armenia.....	.....	.....	.....	1	.....	1
Austria.....	2	1	3	5	3	8
Bavaria.....	.....	.....	.....	1	.....	1
Bohemia.....	1	2	3	1	2	3
Canada.....	2	1	3	26	32	58
Denmark.....	.....	.....	.....	1	3	4
England.....	12	15	27	64	65	129
France.....	3	2	5	14	5	19
Germany.....	39	28	67	158	166	324
Greece.....	.....	.....	.....	.....	1	1
Holland.....	.....	3	3	3	7	10
Hungary.....	2	1	3	3	3	6
Ireland.....	34	14	48	220	366	586

TABLE No. 18—(Concluded).

NATIVITY.	YEAR ENDING SEPTEMBER 30, 1898.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Italy.....	5	1	6	13	7	20
Malta	1	.....	1	1	.....	1
Norway .....	.....	.....	.....	1	.....	1
Poland .....	.....	3	3	6	14	20
Russia	6	.....	6	7	1	8
Scotland	3	2	5	10	12	22
Sicily .....	.....	.....	.....	1	.....	1
Sweden	1	2	3	6	7	13
Switzerland.....	3	1	4	10	1	11
Wales.....	.....	.....	.....	.....	1	1
Unascertained*.....	48	27	75	177	135	312
Total	277	251	528	2,008	2,028	4,036

* Includes 41 men and 25 women known to be residents of the United States admitted during current year.

Of the total number admitted since 1st of October, 1890, the parents of 30 per cent. were both of foreign birth.

In 2 per cent. the parentage on the paternal side was foreign, while that on the maternal side was native.

In 4 per cent. the parentage on the maternal side was foreign while that on the paternal side was native.

TABLE No. 19.

Showing the Residence by Counties and Classification of Patients
Admitted During the Year Ending September 30, 1898.

COUNTIES.	Public.	Private.	Total.
Albany			
Allegany	20		20
Broome			
Cattaraugus			
Cayuga	46		46
Chautauqua			
Chemung			
Chenango			
Clinton			
Columbia			
Cortland			
Delaware			
Dutchess			
Erie	2		2
Essex			
Franklin			
Fulton			
Genesee	17		17
Greene			
Hamilton			
Herkimer			
Jefferson			
Kings	2		2
Lewis			
Livingston			
Madison			
Monroe			
Montgomery			
New York	248		248
Niagara			
Oneida			
Onondaga			
Ontario	33		33
Orange			
Orleans	4		4
Oswego	1		1
Otsego			
Putnam			
Queens			
Rensselaer			
Richmond			
Rockland			
St. Lawrence			
Saratoga			

TABLE No. 19—(Concluded).

COUNTIES.	Public.	Private.	Total.
Schenectady			
Schoharie			
Schuyler	9		9
Seneca	21		21
Steuben	63		63
Suffolk	1		1
Sullivan			
Tioga			
Tompkins	16		16
Ulster			
Warren			
Washington			
Wayne	32		32
Westchester			
Wyoming			
Yates	8		8
Soldiers' Home	5		5
Total	528		528

TABLE No. 20.

Showing the Residence by Counties and Classification of Patients Remaining Under Treatment September 30, 1898.

COUNTIES.	PUBLIC.			PRIVATE.		
	Men.	Women.	Total.	Men.	Women.	Total.
Albany	69	106	175	.....	.....	.....
Allegany	41	37	78	.....	.....	.....
Broome .....	.....	.....	.....	.....	.....	.....
Cattaraugus	2	1	3	.....	.....	.....
Cayuga	99	76	175	.....	.....	.....
Chautauqua	2	3	5	.....	.....	.....
Chemung	41	34	75	.....	.....	.....
Chenango .....	.....	.....	.....	.....	.....	.....
Clinton .....	.....	2	2	.....	.....	.....
Columbia	1	10	11	.....	.....	.....
Cortland .....	.....	.....	.....	.....	.....	.....
Delaware .....	.....	.....	.....	.....	.....	.....
Dutchess .....	.....	2	2	.....	.....	.....
Erie	37	7	44	.....	.....	.....
Essex	4	5	9	.....	.....	.....
Franklin	11	6	17	.....	.....	.....
Fulton	12	10	22	.....	.....	.....
Genesee	33	19	52	.....	.....	.....
Greene	3	1	4	.....	.....	.....
Hamilton	1	.....	1	.....	.....	.....
Herkimer	6	7	13	.....	.....	.....
Jefferson	1	.....	1	.....	.....	.....
Kings .....	.....	2	2	.....	.....	.....
Lewis	5	1	6	.....	.....	.....
Livingston	20	21	41	.....	.....	.....
Madison	3	2	5	.....	.....	.....
Monroe	19	22	41	.....	1	1
Montgomery	11	10	21	.....	.....	.....
New York	123	119	242	.....	.....	.....
Niagara	9	5	14	.....	.....	.....
Oneida	1	1	2	.....	.....	.....
Onondaga	26	34	60	1	.....	1
Ontario	85	80	165	.....	.....	.....
Orange	8	3	11	.....	.....	.....
Orleans	18	10	28	.....	.....	.....
Oswego	3	6	9	.....	.....	.....
Otsego .....	.....	.....	.....	.....	.....	.....
Putnam	1	3	4	.....	.....	.....
Queens	15	20	35	.....	.....	.....
Rensselaer	14	69	83	.....	.....	.....
Richmond .....	.....	8	8	.....	.....	.....

TABLE No. 20—(Concluded).

COUNTIES.	PUBLIC.			PRIVATE.		
	Men.	Women.	Total.	Men.	Women	Total.
Rockland	1	.....	1	.....	.....	.....
St. Lawrence .....	.....	.....	.....	.....	.....	.....
Saratoga	11	13	24	.....	.....	.....
Schenectady	9	14	23	.....	.....	.....
Schoharie .....	.....	.....	.....	.....	.....	.....
Schuyler	31	23	54	.....	.....	.....
Seneca	51	52	103	.....	1	1
Steuben	101	82	183	.....	.....	.....
Suffolk	7	4	11	.....	.....	.....
Sullivan	1	.....	1	.....	.....	.....
Tioga .....	.....	.....	.....	.....	.....	.....
Tompkins	39	42	81	.....	.....	.....
Ulster	1	20	21	.....	.....	.....
Warren	1	4	5	.....	.....	.....
Washington .....	.....	15	15	.....	.....	.....
Wayne	51	39	90	.....	.....	.....
Westchester	15	53	68	.....	.....	.....
Wyoming	2	.....	2	.....	.....	.....
Yates	25	34	59	.....	.....	.....
Soldiers' Home	23	.....	23	.....	.....	.....
State patients	21	2	23	.....	.....	.....
Total	1,114	1,139	2,253	1	2	3

THIRTY-FIRST ANNUAL REPORT
OF THE
BOARD OF MANAGERS
OF THE
WILLARD STATE HOSPITAL
TO THE
STATE COMMISSION IN LUNACY.
FOR THE YEAR 1899.

TRANSMITTED TO THE STATE COMMISSION IN LUNACY.

ALBANY:
JAMES B. LYON, STATE PRINTER.
1900.

Dr. Macy's

COMPLIMENTS.

THIRTY-FIRST ANNUAL REPORT
OF THE
BOARD OF MANAGERS
OF THE
WILLARD STATE HOSPITAL
TO THE
State Commission in Lunacy.
FOR THE YEAR 1899.

OFFICERS OF THE HOSPITAL.

MANAGERS.

HON. S. H. HAMMOND.....	Geneva.
WILLIAM J. POLLARD.....	Seneca Falls.
JOHN H. OSBORNE.....	Auburn.
ABRAM S. STOTHOFF.....	Watkins.
MARTIN L. ALLEN.....	Seneca Falls.
PROF. J. L. MORRIS.....	Ithaca.
MRS. C. S. MONGIN.....	Waterloo.

OFFICERS OF THE BOARD OF MANAGERS.

PRESIDENT.

HON. S. H. HAMMOND, Geneva.

SECRETARY.

WILLIAM J. POLLARD, Seneca Falls.

TREASURER.

HON. J. B. THOMAS, Ovid.

ATTORNEY FOR WILLARD STATE HOSPITAL.

HON. S. S. PARTRIDGE, Phelps.

RESIDENT OFFICERS.**MEDICAL SUPERINTENDENT.**

WM. AUSTIN MACY, M. D.

FIRST ASSISTANT PHYSICIAN.

WM. L. RUSSELL, M. D.

SECOND ASSISTANT PHYSICIAN.

THOMAS J. CURRIE, M. D.

ASSISTANT PHYSICIANS.

ROBERT E. DORAN, M. D. WILLIAM STEINACH, M. D.

CHARLES F. SANBORN, M. D. JOHN W. RUSSELL, M. D.

JUNIOR PHYSICIANS.

DONALD C. ROSS, M. D. ANTON R. SCHIER, M. D.

ARTHUR P. SHELLMAN, M. D.

WOMAN PHYSICIAN.

J. ERNESTINE HILLS, M. D.

MEDICAL INTERNES.

EDWIN G. KLEIN, M. D. LOUIS T. WALDO, M. D.

MATRON.

S. LOUISE LAIRD.

STEWARD.

MORRIS J. GILBERT.

REPORT OF BOARD OF MANAGERS.

To the State Commission in Lunacy:

The managers of the Willard State Hospital have the honor to submit the thirty-first annual report of this institution, for the year ending September 30, 1899, together with the reports of the Superintendent and the Treasurer for the same period of time.

Respectfully submitted,

S. H. HAMMOND,

President of the Board of Managers.

REPORT OF THE MEDICAL SUPERINTENDENT.

HON. S. H. HAMMOND, *President of the Board of Managers, Etc.,*
Geneva, N. Y.:

Dear Sir.—I respectfully forward to you herewith, for presentation to the Board of Managers, the annual report for the Willard State Hospital, for the year ending September 30, 1899, to which the usual statistical tables are appended.

The following statistics show the movement of population for the year reported upon:

	Men.	Women.	Total.
Remaining October 1, 1898.....	1,115	1,141	2,256
Admitted during the year.....	128	128	256
Total number treated during the year.	1,243	1,269	2,512
Average daily population.....	1,102	1,149	2,251
Discharged during year.....	142	117	259

The patients discharged were divided
as follows:

Discharged recovered	31	26	57
Discharged improved	25	21	46
Discharged unimproved	7	3	10
Discharged not insane.....	3	0	3
Died	76	67	143
Remaining October 1, 1899.....	1,101	1,152	2,253

During the year there was a decrease of 14 men and an increase of 11 women, making a total decrease of three. The largest number under treatment any one day was 2,275, on May 20th, and the smallest number was 2,226, on September 17th. Of the patients admitted during the year, 154 were brought direct from their homes; 13 were admitted from almshouses; 2 from hotels; 15 from jails; 62 were transferred from other New York State hospitals, and 10 were received from the Soldiers' Home. All of those admitted were public patients.

There was one patient admitted who was under fifteen years of age. Eight and nine-tenths per cent. of the whole number admitted were over seventy, and of these, 5 were over eighty, and 2 were over ninety. The largest number admitted were between the years of forty and fifty, and the second largest number were between the years of fifty and sixty.

The percentage of recoveries, calculated upon the daily average population, was 2.5 per cent. If calculated upon the number of admissions it would be 22.3 per cent. Of the 116 patients discharged, 7 were transferred to other State Hospitals in the State; 51 were discharged at the expiration of parole; 56 went direct to their homes, and 2 eloped.

The death rate for the year, calculated upon the average daily population, was 6.3 per cent.

One death occurred by suicide during the year. One of the patients, a man, escaped from a working party and drowned himself in the lake.

AMUSEMENTS.

The work of the hospital during the past year, like that of two years ago, was very greatly upset and disorganized by the occurrence of an epidemic of diphtheria, which began about the first of June and continued during the remainder of the season.

Prior to this the amusements for the patients had been carried on as in past seasons, occasional entertainments being provided, ward reading being extended as far as possible by circulating books obtained from the State Library. Ward games were provided and quite a large number of birds of different kinds, mostly song birds, etc., were added to the wards, and the other usual means of diversion, such as outside games, etc., were followed at such times as the patients were not busy at other matters. The steam yacht could be used but little because of the general quarantine of the institution, and field day, for the same reason, had this year to be entirely omitted. The school for patients continues to flourish, and we feel has been of a very decided advantage to the patients.

OCCUPATION.

This matter, as in years past, has been closely studied by us with the intent to provide as varied occupations as possible for the patients in the care of the hospital, and to increase the number of those following useful occupations already established.

The industries heretofore engaged in have been maintained as usual, with the addition that rather more has been done in basket making, brush and broom making, carpet making, etc.

A new carpet loom with fly shuttle was allowed during the past year, and this has been put in operation, and the patients have also begun to make blacking brushes, hair brushes, bathing brushes, etc.

A larger number of shoes are now made than ever before, and at the time of writing this report we are making all of the shoes used by the inmates of the institution, and everything in the way of footwear, except boots and rubber goods, which latter, of course, cannot be engaged in. During the season, the Lunacy Commission made us an allowance for the beginning of a canning plant for the hospital, and I am pleased to be able to report that we have canned over 3,000 gallons, mostly of tomatoes. We hope in time, with the growth of our fruit orchards, to be able to take up the making of preserves and canning of fruit as well.

THE GENERAL MEDICAL WORK OF THE HOSPITAL.

I am very glad to report that the work of the medical staff during the past year has been most excellent in its character. The system of daily meetings between the first assistant and the staff, as well as occasional meetings with myself, has been carried on, and I would state that this scheme, while not adhered to inflexibly, has been followed almost from the time that I came to this institution. This method of bringing the staff together, and having a general consultation with them concerning such matters as relate to the details of the hospital work, etc., was pursued by me a good many years ago in the hospitals at New York, and though there are difficulties in the superintendent constantly following this system, it has seemed to be very beneficial to get the

staff together frequently when it is possible for the superintendent or the first assistant to meet them, and by this method of consultations to stimulate the doing of better medical work, and the closer attention to the small details of hospital life.

The monthly medical meetings of the medical society were continued as previously, and have been of very great interest to us all, and I think much benefit has been derived from them. We have been able to have at different times, a number of outsiders present, and I think that our meetings were fully as much appreciated by them as by ourselves. Drs. V. A. Moore and Bert B. Stroub, of the faculty of Cornell, have very kindly volunteered their services in reading papers on several occasions, and it has been very gratifying to us to find that they were so much interested in our work.

Dr. John S. Kirkendall has continued the special eye work as during the previous year. We have also had the services of a dentist for our patients four half days in each month.

In the surgical work of the hospital we are greatly indebted to Dr. William B. Jones, of Rochester, who has very kindly given his services to the hospital in assisting us or in operating personally when we have had particularly dangerous operations during the year. In all we have had some 31 operations of a serious character, in that time.

The system of having the physicians in charge of the chronic cases alternate in assisting the physicians on the acute service has been continued, and has been of great benefit to all concerned, the work being systematically divided, more occupation being provided for the physicians having services that are not particularly active, and closer and more individual attention, in this way, being given to our acute patients. Our work has been so successful in this way that it is with very great regret that we anticipate the coming year, when we understand that we will have to make a reduction in our medical staff. I believe that the present medical staff is none too large for the work done at this hospital, and that another physician would be of great benefit, particularly where this close system of the study of our cases is followed. Many



W. H. HALLENBECK, CRAWFORD CO.

WILLARD STATE HOSPITAL.—MAIN BUILDING.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 1.



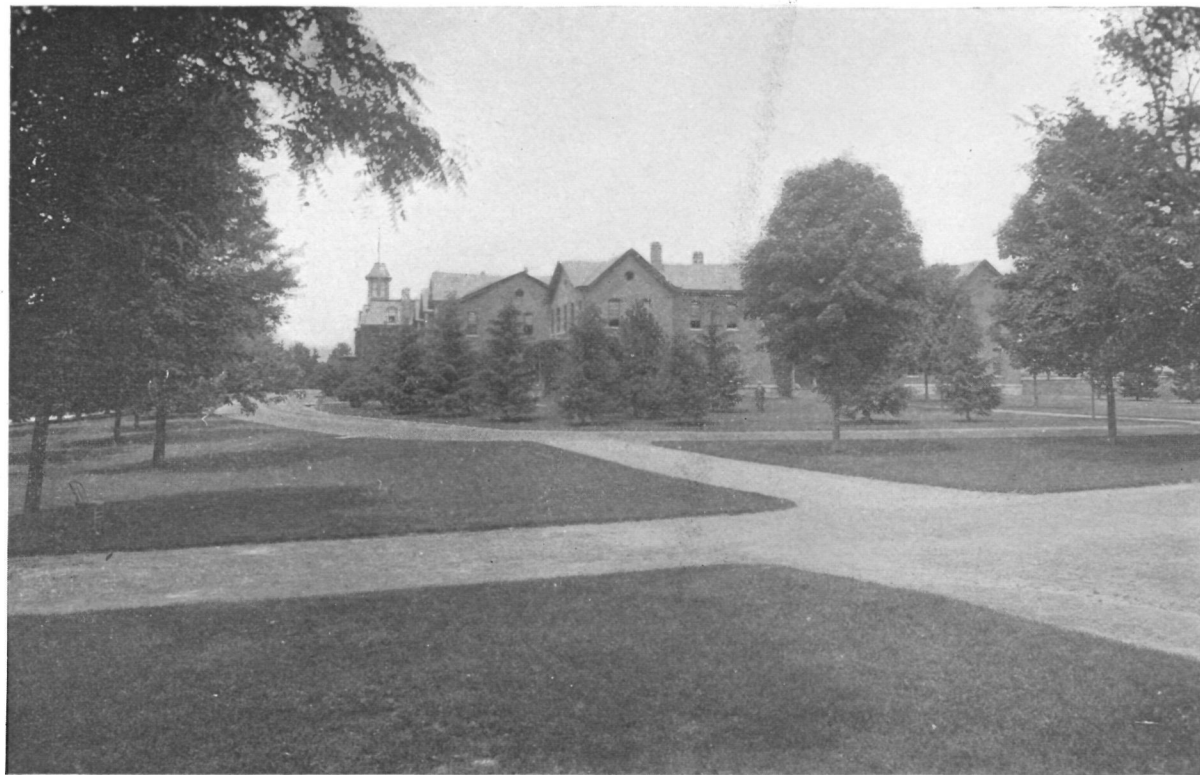
WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 1. PATIENTS MAKING A NEW ROAD.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 2.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 3.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 3.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 4.



WILLARD STATE HOSPITAL.—A BIT OF THE DRIVE AT DETACHED BUILDING No. 4.

chronic cases are always more or less uninteresting, and unless considerable enthusiasm in the work can be instilled into the assistants, I think there is a tendency in institutions for the insane for the attention given the chronic patients to become, to a certain extent, perfunctory, and where the physicians do not realize the full extent of their opportunities as well as their responsibilities, criticism is caused now and again because it is thought they are not sufficiently busy with their work. However, it is my opinion that such criticisms if too sweeping are entirely unjust, and that too little individual attention is given to our patients, particularly recoverable cases, rather than too much, and where such a system as I have referred to prevails, the proper remedy is not in the reduction of the number of medical men attached to the institutions, but the reorganization of the medical service. This work, too, must be very slowly done. You cannot always obtain men of equal abilities, even in a private institution, and, to have the highest class of work, it is necessary to have high class medical men, and it is necessary for some of those at the head of the staff of such an institution, other than the superintendent, to be very close in touch with the medical work at all times, to stimulate in every way the zeal and interest of the other assistants, particularly the younger men.

Following the methods that we do in this country, of having a few men at the head of an institution staff that are only moderately well paid, but who are paid enough to cause them generally to remain a number of years in the work, and paying the remainder only such salaries as will attract men who would necessarily be looked at as beginners in the service, it is not possible, except by a persistent method of selection and constant training, to obtain for such positions men that are as well qualified at the beginning of their time of service as is desirable. With few exceptions, the men appointed to these positions are beginners, and without previous experience in this work. The positions are not, and could not be expected to be, attractive enough to retain any very large number of experienced professional men in such a

calling, when not attached to some hospital, so that there would be the opportunity of filling these vacancies from among experienced hospital men. This being the case, it seems to me all the more unjust that criticisms should be made which must necessarily result (when influencing those who supply our funds), in crippling the medical service when reductions are made, because of our sometimes having men in the service, taken from the civil service, that are not as well adapted to hospital work as they might be for other work, and, while now and again there may be those who are inclined in this work to do rather less than they should, I feel certain that the large number of our medical men are of the highest character, energetic and enthusiastic in their work and inclined to be progressive, when they feel that they are met with the same spirit.

The practice of hydropathy in favorable cases, the use of static electricity, massage, etc., have been followed during the year.

I wish to record the fact that, with the consent of the Lunacy Commission, we were enabled during the past season to be supplied with a 30-inch ten-plate Van Houten & Ten Broeck static electric machine; also with an X-ray outfit. This machine, with the small electric motor that operates it, allows us to get various rates of speed, and the results that we have obtained have been quite gratifying. The X-ray, particularly, has done excellent work, and in fracture cases especially it has been of great assistance to us. We have used it on several occasions for demonstrating the presence of foreign bodies, and believe that we are going to find that this will have quite a future in our work, in an institution with as large a population and as much isolated from the centers as we are.

TRAINING SCHOOL FOR NURSES.

The usual work of the training school was followed during the past year, the graduating class numbering eight and the junior class for the coming year twenty-five. Owing to the long hours of work that the nurses are compelled to serve, the compara-

tively small proportion of attendants that we are obliged to keep on certain of our halls, and the much greater responsibility that the attendants must necessarily carry in caring for acute and dangerous cases, I think there is a tendency from these causes to prevent the nurses from going into the training school because of the small amount of time that they have to themselves. It seems to me that the hours of their work are indeed exceptionally long, the attendants working from six in the morning till ten at night every second night, the hours of work for the alternate evening closing at seven. This could be materially changed so that they could leave their work at nine o'clock instead of ten o'clock on the day of their long tour of duty if it was possible for us to rearrange their pass-days, having the time that the employees would get, come so that they would take it altogether, instead of one pass-day of ten or twelve hours and every third Sunday. This, however, with the conditions that are operating here, would prevent a large number of the employees from ever attending church, though they could easily be given considerably more time in the month than they now get without taking it from their working hours, and so much opposition by the employees themselves has been shown to any change in this direction, because of their losing their privileges of attending church, and also from the fact that, isolated as we are, if they took the pass-days they would be compelled to pay expensive railroad fares, hotel bills, etc., when going to a distance, that I thought it best to drop this whole subject and not try to make this change, notwithstanding the amount of benefit that would accrue to the employees by the increased amount of time away from their work.

The work of nurses and attendants upon the insane among those cases that are noisy, violent or otherwise troublesome, is about as irksome as any kind of work that is performed, and it would seem to me that rather too little attention has been given to this matter, and that where a disposition is shown to decrease the amount of help that is given to us, this matter ought to be given careful consideration, not only because of the depriva-

tion we must suffer in the matter of help needed in caring for curable cases, violent and dangerous cases and any cases needing special attention, but also because of the consideration the employee is entitled to receive.

If you lengthen the hours of work for the nurses and decrease the force too much, there is little doubt but that there comes an increase of irritability on their part and a disposition to be less kind to the charges, and I firmly believe that if we wish to maintain the highest grade of humane treatment for the insane, to say nothing of the best curative methods, it is absolutely necessary that this matter should not be overlooked, and the comfort and welfare of these employees, both while at work and when off duty, should be thought of and proper provision made for them.

A little done in this way in the matter of pleasant recreation rooms, commodious quarters for the many away from the noise and disturbance of the wards, and other little matters of this kind, produce the most favorable results, and enable us to not only get, but to retain in the service, a much higher grade of attendants and nurses than can be the case when the hours are so extremely long, the quarters very cramped, attendants being huddled together, oftentimes two in a room, and there is little or no provision made for their meeting or associating off duty. These results have been particularly apparent at Willard, and, while during the past two years we think the grade of employees has materially improved, and the interest in the nursing and the work about the insane on the part of the employee has considerably increased, we have found much difficulty in retaining the best grade of nurses who have applied, and feel that to a considerable extent this is attributable to the above-named causes, and hope that the time is not far distant when more suitable accommodations will be provided for our nurses by the erection of an employees' home, and that suitable recreation rooms, etc., can be obtained, and would very respectfully solicit your attention, as well as that of the Lunacy Commission, to this matter.

EPIDEMIC DISEASES.

Cases of typhoid fever have continued to develop off and on during the entire past year. I have repeatedly recorded my opinion that the continuance of this disease, as well as other cases of an enteric nature, was due to the contamination of our water supply from sewage. How far this operates in depreciating the health of our people, it would be really impossible to say, but that it does so seems to be certain. During all of the past spring, we noticed that our people suffered more than usual from minor ailments of all kinds, particularly sore throats, the hospital having almost an epidemic of this sort running continuously and for weeks, sometimes twenty to forty people being affected at one time. This was followed on the first of June by an outbreak of diphtheria, and up to the present time there have been forty-nine (49) cases of membranous diphtheria scattered around and distributed among all the different buildings, and all but two cases in adults.

There were two children affected, the child of the head farmer, who resides on the grounds, and a son of the first assistant physician, Dr. Wm. L. Russell. Among these cases there were many of quite a severe form, and the temperature in a number of instances ran quite high, but I am very much pleased to state that there have been no deaths, and attribute this very largely to the early treatment that was possible, and the handling of these cases with anti-toxin. When the outbreak occurred, our laboratory work was well in hand, and we were very fairly equipped for examining a small number of cultures daily. There were, however, so many cases of the membranous type and of the germ infection only, we were compelled to ask the Commission for additional assistance, and Dr. Harlow Brooks, the associate in bacteriology of the State Pathological Institute, was detailed by Dr. Van Gieson, at the request of the president of the Lunacy Commission, to come here and assist us.

Dr. Brooks very kindly arranged to have his wife, Mrs. Brooks, who had a very considerable amount of experience in bacteriology, come here and help in the examinations, and later, when he was

obliged to leave, he arranged to have Dr. F. A. Goeltz come from New York and help in the examinations that he was making. This, with the help that we could detail from our own force, enabled us to organize a laboratory capable of making from 150 to 300 examinations daily, and, pursuing a systematic method of segregating the patients and employees, particularly where there was known infection, and, in these latter cases, establishing a rigid quarantine, not only of the individual buildings, but when it was required, of the entire institution, and, immunizing patients and employees alike throughout, we were able to break the force of the epidemic, and I hope that the trouble is now at an end.

During the course of our laboratory work a variety of investigations were started, including examinations of the dust on the floors, walls, furniture, etc., to ascertain whether the diphtheria germ was present in the surroundings, and whether we could attribute the spread of this disease to that, or whether it was solely due to direct transmission.

Besides these investigations we also made examinations into the condition of the sewage, the water supply, the condition of our live stock, and other matters where we might have any idea that any condition might prevail that would either cause deterioration of the general health of the people, or where there might be a direct transmission of diphtheria germs. Dr. Brooks, who conducted this investigation for us, reports that some of the germs that were found seemed to indicate the presence of conditions that would predispose in undermining the general health of the people, or might operate in causing the sore throats that were so prevalent in the early spring. In the examination of the drinking water supply, cultures were made from water taken close in shore on the lake front, and at a distance of 1,400 feet from the shore at the mouth of the intake pipe. We also took specimens for making of cultures at varying distances from the hospital, both in the middle of the lake and at distances of several miles, including both deep specimens and surface specimens at depths ranging from 100 feet to 550 feet deep. Temperatures of the water were

also taken, and we found that at the depth of 28 feet and at a distance of 1,300 feet from the shore on the 15th day of August, we obtained a temperature of 60° F. This was just at the end of the intake pipe through which our drinking water supply is obtained. When we went into much deeper water, we found that at varying depths ranging from 450 feet to 550 feet, the temperature was almost constant, reaching 39° F, or 7 degrees above freezing.

Cultures taken 1,400 feet from shore, and at the depth of 100 feet from the storage reservoir; and, cultures taken from water from the tap at the main pump room, after allowing the water to flow, all showed the presence of the colon bacillus. What the deep and surface cultures, taken at a distance from the hospital will show, I am unable at this time to state, because of our not having as yet been furnished by the director of the Pathological Institute with the full report, but, considering that our intake pipe is below the sewage pipes, and what little motion there is in the lake, is generally in this direction, and that we have found undoubted evidences of the colon bacillus at the places named, it seems very positive that the drinking water is badly contaminated, and I again draw the attention of your Board to this fact with these particulars, and most respectfully insist that some radical measures should be taken to meet and change these conditions and to protect the health and safety to life of our people. These facts have all been in the possession of the Lunacy Commission on numerous occasions in the past, and the continuance of occasional cases of typhoid fever, and the absolute certainty of the drinking water supply being contaminated, has been again and again brought to attention, and in very respectfully bringing this up once more and in its present shape, before your Board, I must insist that if the conditions, like the water supply, the plumbing, etc., that have been so often reported, are not taken care of, not only will I disclaim all responsibility for epidemic or other diseases that may happen in the future, but I would very respectfully draw to your attention the fact that these matters will be very much harder for us to manage, and the Hospital and the State authorities, whose duty it is to provide the necessary funds, etc.,

will be liable to severe criticism. We, at least, will have done our part in drawing attention to these matters, and if trouble must come, I think there should be no doubt as to the stand we have taken.

In the last annual report I outlined different methods which could be used to meet these conditions, and considering the results that we found in the present investigation, I am inclined to think that the utilization of the lake water should be, if possible, entirely abandoned where it is known that from the hospital as well as from Watkins and many of the small towns along the border of the lake, hundreds of thousands of gallons of infected material in the shape of sewage, is being poured daily into this body of water.

Large as it is, it seems to me that there is a probability that this water has been and is considerably infected, the more so for the reason that all of the deep water is so cold that putrefaction could not take place, and germs reaching this strata, if any did, would be likely to be preserved there longer than on the surface. To be sure, many authorities hold that the most of the germs are light and naturally would rise, and if this could be definitely ascertained as applying to all disease germs, and it were possible to get a perfectly tight intake pipe, that could be carried into the very deep water, I presume as safe a source of supply of drinking water would be found as could be obtained anywhere, but questions of this kind have not been definitely settled, and it would seem as if, by driving sufficient number of wells on the hills back of the hospital, that not only could sufficient water for the hospital be obtained, but as a large expenditure would be necessary for carrying out any plan looking towards remedying this trouble, it would be more advisable, if possible, to get a supply of water that would be brought to the buildings by gravity because of its thus obviating all necessity of pumping and thus avoid the expense that we are now put to, to provide the hospital with its water.

A number of cases of smallpox, scarlet fever and other contagious or infectious diseases have been reported from time to



WILLARD STATE HOSPITAL.—VIEW OF BRANCH FROM THE WEST.



WILLARD STATE HOSPITAL.—VIEW OF BRANCH FROM THE NORTHEAST.

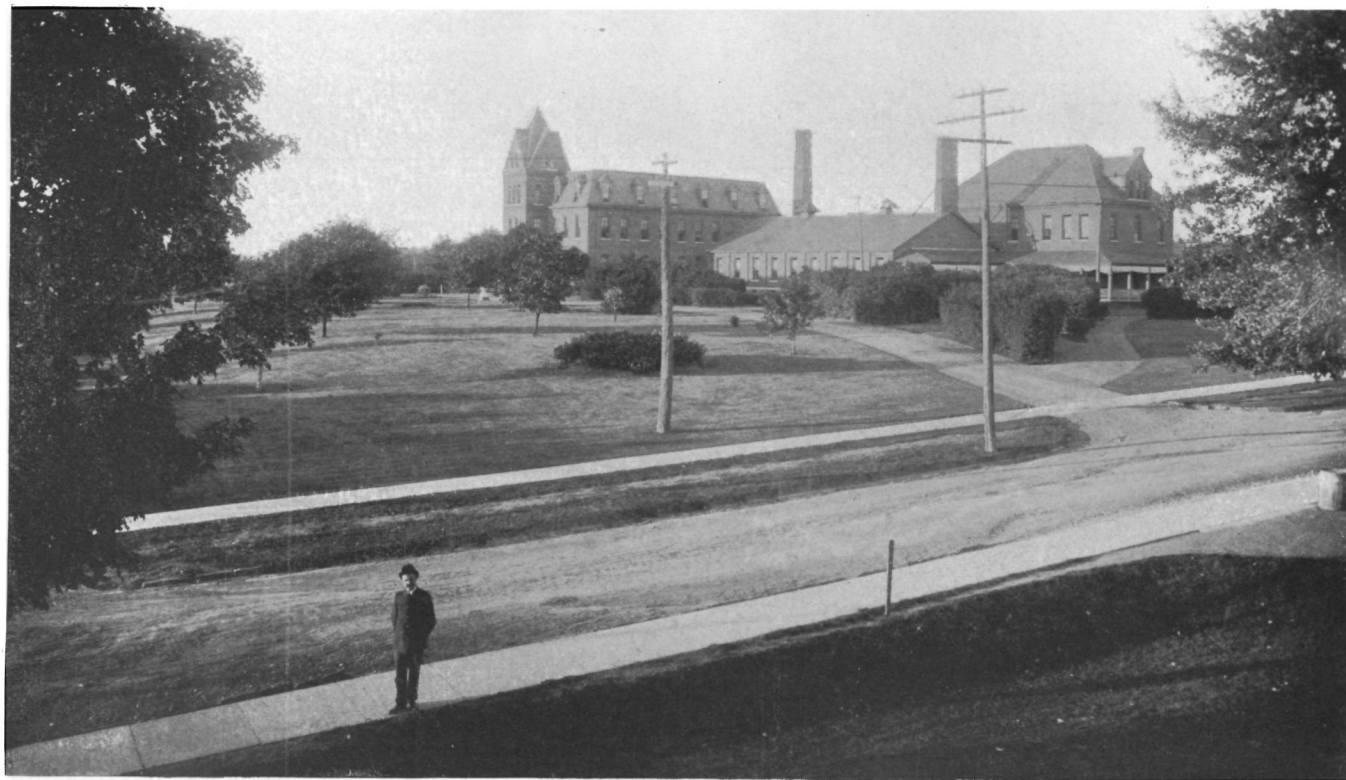


WYNKOOP HALLENBECK CRAWFORD CO.

WILLARD STATE HOSPITAL—THE NORTH WING OF THE MAIN BUILDING.



WILLARD STATE HOSPITAL.—BIRD'S-EYE VIEW OF HOSPITAL AND GROUNDS.



WILLARD STATE HOSPITAL.—INFIRMARY FOR MEN.



WILLARD STATE HOSPITAL.—BIRD'S-EYE VIEW LOOKING SOUTH FROM THE MAIN BUILDING.



WILLARD STATE HOSPITAL.—BIRD'S-EYE VIEW LOOKING EAST FROM TOP OF MAIN BUILDING,



WYNKOOP HALLENBECK CRAWFORD CO.

WILLARD STATE HOSPITAL.—VIEW IN FRONT OF ADMINISTRATION BUILDING.

time during the past year, within the district of the hospital, but I am very glad to state that no cases of these diseases have developed at Willard.

In maintaining our quarantine, the small building that we vacated in the last epidemic, and which was prior to that time leased to employees as a dwelling house, was of extreme value, but the number of cases that we had to isolate was so large that we were soon compelled to look for more room, and this was provided by the purchase of a number of tents allowed us by the Commission, and the transfer of patients from one ward in each of two buildings, so that by crowding them in among the others, we were able, in vacating these wards referred to, to maintain a detention ward for patients of either sex. Our general resources were also supplemented by the allowance of a small formaldehyde generator, and afterwards by one of the larger size. We were also given a steam disinfector of the Kny-Scheerer type, large enough to disinfect two or three mattresses when rolled up and thrust into the disinfector at one time. This latter apparatus was extremely useful, as we found that we could register a temperature of 240 degrees, and very thoroughly disinfect anything that we could get into the machine. We also found that when properly handled, wool goods shrank very much less than would have been the case with any other method of disinfection, and much less property, both personal and institution property was lost in this infection than was the case in the last epidemic.

The demand that this trouble extended for anti-toxin because of the immense number of people that we had to treat, sufficed to make this matter an exceedingly large expense. Several hundred dollars worth was purchased from the New York City Board of Health, and afterwards from the Mulford Co., of Philadelphia.

Finding that this matter was going to reach large proportions, after some correspondence with Dr. H. M. Biggs of the New York Health Board and others who were exceedingly kind and helpful, upon the suggestion of Dr. Wise, the president of the Lunacy Commission, I made direct application to the Hon. M. C. Murphy

of the New York City Board of Health, to see whether they could not make some arrangement by which we could obtain anti-toxin, in the very large quantities that we required it for complete immunization, at much less than trade price. Very much to my surprise, Mr. Murphy in answering in a very kind and courteous letter, made the tender of a quantity of anti-toxin that they had. to this hospital, and in all, that department gave this hospital from \$1,000 to \$1,200 worth of anti-toxin free of charge. This can only be considered as the most generous action on their part, and it is with the greatest pleasure personally, that I record at this time, our indebtedness and our appreciation to the New York City Board of Health, as well as to the Hon. John B. Cosby, M. D., who wrote me at that time and assisted us, and to Dr. Biggs and Dr. Wm. H. Park of the bacteriological department. It was help given us at a time when we were in sore need, and given so unhesitatingly and with such an expression of sympathy and a desire to assist us, that it makes our feeling of appreciation all the keener. I wish also at this time, and in this connection, to record our sincere thanks to Dr. Ira Van Gieson and Dr. Harlow Brooks of the Pathological Institute, and as well to Mrs. Brooks and Dr. Goeltz, who also assisted us.

The work of the laboratory was extremely trying and undoubtedly wearing upon the nerves and strength of all those who engaged in it. During a portion of the time of the epidemic, the laboratory had to be carried on week days or Sundays, to almost the limit of endurance of those who were making the examinations, and the restlessness of some of the employees of the hospital, because of the necessary restraint, and in many cases isolation because of the quarantining of buildings, etc., made it all the harder for all of us. It seems at such times that people usually are either very much frightened, or they become so accustomed to having danger about them, that they grow so careless that there is a great difficulty in properly managing them, and when they are closely confined by quarantine, it would seem as if many spend a good deal of their spare time either in criticising what was done on the one hand, or if the infection reaches any of their own im-

mediate friends, in condemning what others are doing and the institution, for not being strict enough. My experience has been that this is always the case either in an institution or in an outside community, and, considering these facts, it is worthy of record that only a few gave us any real trouble in this connection, and the large majority of all showed a great willingness to co-operate with us in everything that we did to stamp out the disease, and to protect the people, and while one case of diphtheria did occur outside of our grounds, there was no telling whether this did not originate outside, and with this exception, unless it be not an exception, no other cases of this disease spread from the institution.

Considering the large number of people living in close proximity to the hospital, and particularly the very large number of children in the homes of these people, it is a matter of great gratification that the disease did not spread outside.

IMPROVEMENTS.

Besides the installation of the canning plant, which is only a beginning in this direction, and enables us only to take care of such canning as can be done in the way of putting up tomatoes, peaches and pears, no special machinery for other fruit or vegetables being thus far obtained, the following additional improvements are to be noted for the past year: The entire outside of the main building was painted one coat of paint; the very last work in connection with the plumbing of the north wing was completed in the last two months of the fiscal year, and the installation of nine Brightman automatic stokers, which I think was referred to in the last report, was also completed. Various repairs were made at certain of the outside buildings, some of the brick work having to be entirely taken down because of the flimsy construction when originally put up. Piping to extend the water supply for the east buildings, was laid, and a system inaugurated so that all of the buildings east of detached building No. 1 can now be supplied from a pump at the main reservoir with lake water. The east reservoirs are connected on one of the old lines

of pipe for fire pressure, and an irrigation pipe was run through the center of our garden with hydrants for irrigating, and during the past dry season this improvement I think fully paid for itself in one season. A wire screen was stretched beneath the clothes-horses in each of the drying compartments of the laundry, preventing the danger that we have hitherto run from having the laundry set on fire by clothes dropping on the steam pipes. The slaughter house was removed to the site of the new piggery. The portion of the main building known as the "fan room" was repaired and altered over during the past year, rooms for the employees being placed in the second story. In connection with the extension of the water supply noted above, a set of pipes were installed at the main reservoir, and also a steel distributing tank was placed in the attic at the branch to supply water to that building, and to the reservoir furnishing water to the infirmary and to detached building No. 3. Minor repairs have been made to the roofs during the latter portion of this season, and miscellaneous work of the usual kinds in the way of carpentry, painting, repairs to the steam heating and ventilating plant, etc., have been prosecuted throughout the year.

During the season the Commission allowed us funds for the purchase of a barge for bringing sand from the hospital sand bank across the lake, and this has been furnished, and we think is an excellent purchase. We hope in a very short time to have a rough dock completed by driving a few piles opposite the sand bank for a runway, and think that in any active year enough money can be saved on the sand that we will get to fully offset the cost of the barge and dock. This has proven the case in some years past, and we have been very desirous of getting the barge for this purpose for that reason.

The manholes on the main sewer, referred to in the last report, were completed during the past year. Money was allowed us for repairing and remodeling the building known heretofore as the "Meddick House," for furnishing the same, and the same has been completed. This building will give us additional accommodations for twenty-five or thirty patients. Funds were also given

us for the construction of a breakwater on the north side of the warehouse, and also for repairs to the main laundry floor, which had become broken and worn out. The breakwater has been completed, and the repairs to the laundry floor are now under way.

Very decided improvement was obtained in the heating of the institution, by the changes mentioned in the last report, and I am glad to state that our people are much more comfortable than heretofore. There have been and probably will be, until some considerable change is made in the heating and ventilating system of the institution, times when it is difficult for us to effectually heat all of the wards. The culvert on the railroad embankment, and the allowance for the air compressor referred to in the last report, were transferred to other accounts. Nothing was done about these matters.

While I do not attribute it entirely to the purchase of the stokers, it is with pleasure that I am able to report that the cost of this hospital for fuel and light, as shown by the Tenth Annual Report of the State Commission in Lunacy, is less than for any other hospital of the State. It is to be hoped that one of these days we will be able to supply the remaining boilers of the institution with stokers, and because of the annoyance that we have had with the use of soft coal, I would recommend, if possible, that stokers for burning buckwheat or pea coal be obtained even if the cost is increased. The presence of so much soft coal smoke around a public institution is a very great detriment and annoyance, and I think there is no question but what it is very dangerous to the health of the people. Even with the best type of stokers obtained, the smoke nuisance is not entirely abated, and it seems to me that there is little use in compelling people to breathe into their lungs any more free carbon than is absolutely necessary, and that failure to prevent people from this results in an increased number of cases of consumption and other local troubles which might easily be avoided in many cases.

It seems needless to repeat every year the reference to the amount of grading, gardening, farming, handling of freight, ditching, caring for lawns, flowers, etc., that is constantly done around

an institution of this kind. It would seem sufficient to state that over fifty per cent. of our people were employed on all work days at some useful occupation, and to draw attention to the great success of the hospital farm, which is so well known by the members of your Board. In all we were allowed some thirty-eight thousand dollars (\$38,000) for betterments and improvements during the past year, considerably more than twice what we expended for similar purposes the year before.

ECONOMY.

I anticipate that the reduction in the force of the hospital, that is thought likely to occur at the beginning of the coming year, will very materially decrease the efficiency of the hospital service and increase the cost of maintaining the work, particularly in the case of ordinary repairs. After experience of many years in public institutions, and work of this kind, it is my opinion that a moderate force of employees regularly employed in connection with institution work, such as carpenters, painters, pipe fitters, etc., can accomplish more economically and better, such improvements as are constantly desirable about institutions of this kind, in taking care of the wear and tear, than can be done by bringing in people who work at day's wages on special estimates, and endeavoring to contract this work out, and where we have had a difficulty in securing sufficient number of people to be detailed at this kind of work, the invariable result has been that the institution has been compelled to be more or less "down at the heel," "shabby," and "out-at-the-elbow," and that this in itself has reacted very unfavorably indeed upon the inmates.

Experience tends to show that where the wards and buildings are neatly and attractively kept up, furnished and maintained, that this very thing encourages self-respect in the patients and acts as a quieting influence, producing a more contented and ready disposition to comply with the regulations of the institution and to submit to treatment, and so marked has this been that in the best of these institutions the noise, disturbance and violence that formerly was everywhere to be found in an insti-

tution for the insane have almost, if not entirely, disappeared, when the institutions are not too grossly overcrowded. The two things, however, go together, and even under the best surroundings, with too great overcrowding, the old restlessness comes back. This we have experienced as well as others, and we cannot but long for the time when our wards will again be brought to their proper capacity, and we find the condition such that the surroundings can be maintained to give the most advantageous treatment to our patients. With the general tendency to economize that has appeared during the past year or two, more or less discontent has been shown on the part of the inmates of the hospital because of it. I do not wish this to seem to have been said in any hypercritical spirit, but wish to very respectfully remind your Board and the Lunacy Commission that such a thing can occur as to economize too much, and that in pitting one institution against another in trying to economize, efficiency may be lost sight of, and that the tendency is always under these circumstances in this direction. I do not believe that it is possible for people who are almost, if not constantly, at arms length from these institutions to know exactly what is for their best interests in every particular, and to make reductions without the most thorough investigation and actual knowledge of conditions, as to any particular article or articles of food, clothing, apparatus, etc., or to deny many other requests, intelligently, and to compel the institution to adapt itself to the changed circumstances (even though I believe economy should constantly be followed), and, if such reductions are productive of sufficient dissatisfaction, reaction is bound to come in the long run. It has always been our desire to be economical, but within the bounds of efficiency and sufficient liberality to accord with a humanitarian view of the care that we are trying to provide for our charges, and it seems to me that surely humanity can be better tempered with economy than economy with humanity. The true humanitarian is always ready to listen to any arguments that will tend to show that equally good results with those he seeks to obtain can be secured more economically, but the economist when seeking to keep at

the lowest possible notch is too apt, as experience shows, to split the straws that shade his ideas of humanitarian care, until in the long run his object is not the greatest efficiency and the best economy, but the lowest priced grade of care that his estimate or standard of affairs will allow, and I venture to add a word of warning as to the future, if this is not recognized in time and avoided. Already it seems to me that we are going too far in some of these directions.

The changes made necessary because of the reduction of the appropriations by the last Legislature will result in thirty-three positions being discontinued after the 30th of September. While this reduction was not made from among our ward employees, the result of it will fall upon the ward service to a considerable extent, as all relief, for the departments crippled in all the emergencies that may arise, must necessarily be taken from the ward service. This is really deplorable, and in my opinion is a retrograde step sincerely to be regretted by all of the friends of the insane. The loss has been felt most severely in our mechanical departments, and while we can allow everything to go for a time, things must run down about the hospital, and I am certain that in the long run it will cost the State more to get the institution again into good shape than if this policy had not been adopted. The argument is advanced that there is a tendency to do more independent work, new construction, etc., at these institutions than is advisable, but I would ask that you consider this a little differently and question whether there is not often too little rather than too much done in this way, and as to whether it is possible to find any institution anywhere, that does not require to have more or less of this work done in the way of repairs and betterments or for equipment, be they hospitals, prisons or anything else. With a large institution of two or three thousand people there are lots of things constantly coming up demanding immediate attention, and many requirements that must be met without waiting, and if these matters have to be put over to await the making of estimates, which in their turn must take their chances of being disallowed, the tendency because of all this delay is intensely discouraging, and must, in my opinion, work harm to the service.

Our help in the engineer's department will be reduced at the beginning of the coming season, that we will not be able to keep up steam at night till forced to do so by the cold nights, and probably we will have to get along the best we can till the middle of November in this way. The only relief we can obtain in the case of sickness, absence, etc., among the firemen, will be had by detailing men from among the ward attendants who may happen to know something about firing, and though under the schedule of wages, the firemen are allowed their Sundays in rotation and a vacation each year, not one single Sunday or any other days can we afford to give them, as our affairs are at present. It seems very hard to understand why it should have seemed necessary for the members of the Legislature, who directed the framing of the bill that caused the reduction in our moneys, to cut off means from the hospitals for the insane. While some of the other institutions of the State may have been increasing in their expenditures of late years, the contrary is true of the State hospitals, and considering how much remains to be done in this work, besides taking care of the overcrowding manifested pretty generally in all countries at the present time, it would seem as if, considering the general prosperity of the country, it was a good time to have continued the improvements the State had previously had in contemplation. However, I believe that as these things become better understood that this must and will be changed. All people are interested in the care of the insane, few families not having some relatives more or less nearly connected, or friend, in one or other of the hospitals at some time, and I cannot think that our law makers intend to cut off funds that are really needed, and believe that upon further study of this question they will be convinced of the necessity for more funds than we had this year.

NEEDS OF THE HOSPITAL.

After the experience of the two previous years, it seems almost useless to make any formal record of the needs of this institution. If all the variety of matters that we have referred to in the past could receive proper attention, so as to bring this institution,

which is one of the oldest in the State, and most out of repair, and least adapted to the work that we are trying to do, into such a condition, that, for once Willard would be up to date and more or less of a model institution, it would require an expenditure of two or three hundred thousand dollars. To be sure, some of the minor matters referred to have been allowed upon small appropriations by the Lunacy Commission, but the sum total remaining is so large that I hesitate to burden this report with a repetition thereof. Indeed, I would say that certain matters which are equally deserving of attention, have been kept out of original lists for fear of making the amount seem too large.

At the present time we look forward to a year in which, so far as we know, there is scarcely a dollar allowed or likely to be allowed for any improvement whatever. It may be that we will be able after a fashion, to keep up the medical work of the institution, and to keep the buildings, etc., from suffering too great deterioration, but with the absolute lack of adequate funds that we are told we face the coming year, it is with the most serious concern that we anticipate the future. There seems to be a tendency abroad to decrease the hospital appropriations, without any investigation into their necessities, thereby trifling with matters affecting the most serious interests of our work, and, notwithstanding the fact that, as far as this institution is concerned, the expenses for maintenance are as low to-day as they were in the early years of the history of the institution, when it provided solely for the chronic insane. It can hardly be that the people of the State are becoming careless concerning the welfare of their insane, or that the taxpayers would be inclined to grumble over the great amount of good that is obtained in these State hospitals for the little cost, or, that any well-informed person in the State has failed to recognize the magnificent character of the work that this State has done for its insane, but rather it would seem that some of the most active forces that in the past were a power for bringing about good, and in stimulating progressive work, have allowed their interest and their watchfulness over this work to flag, possibly thinking that it was no longer required, and that

perfection had been attained. It is necessary, therefore, to remind those friends of the insane that perfection never can be obtained, and that no state of affairs will ever be reached where it will not be necessary for a keen, close oversight of all of these matters, for them to be maintained at a sufficiently high standard. Changes that they little think of, come at short notice, enemies of the service start up where none were ever expected—people who in many cases will become real friends when posted and informed, but who evidently know little or nothing about the subject, and those outside friends of the insane can very much more freely and without seeming prejudice, insist upon what is right and best, and fight their battles, than can we who might be accused of personal interest or bias. For the reason specified in the beginning of this paragraph, any detailed description of the needs of the hospital in different particulars is omitted. The following list of headings, however, is given to show in what direction improvements could be advantageously added to, or made in the hospital:

Cold storage.

Sidewalk and gutters and repairs to walls, etc.

Milk room and pasteurizing apparatus.

Changing bathing system to spray baths.

New pantries at D. B. 1 and D. B. 3.

Repairs to roofs and painting same.

Two attendants' homes.

Fire alarm system.

Renewals to plumbing.

Fence around branch fields and farm.

New steam main.

Change in water supply system.

Rebuilding locomotive house.

Drying kiln for lumber.

Extension of kitchen entrances. (This is for the main kitchen to protect the food, and patients carrying in in winter.)

Chicken houses at barn.

Fans for kitchen.

Rebuilding storehouse at dock for industries.

Bathroom extensions for north and south wings.

Fire boxes on wards.

Balconies and quarters for tuberculosis patients.

Tile floors for kitchens where needed, and for congregate dining-rooms.

Rebuilding of " Van Vleet " house for forty patients.

Motor for food elevators.

Solariums for sick at branch and infirmary. (Should have small solariums for north and south wings also.)

Enclose fire escapes at top and sides.

Saucepan racks of galvanized iron.

Bread cupboards and dressers for dining-rooms.

Extension of fruit orchards.

Delivery trucks for kitchen, laundry and other supplies.

Gatehouses and gatemen.

Moveable upper sash.

Slat doors for nurses' rooms in summer.

Hose washer.

Fly screens where needed.

Screens for basement windows of shops.

Stokers for rest of boilers.

Changing single rooms into dormitories.

Enlarging dining-rooms at detached buildings.

Connecting corridors in detached buildings.

New building for acute cases.

New building for the hospital sick.

Farm fences, implements and tile.

Machine shop equipment.

Painting and steel ceilings.

Furniture.

New floors.

Piazzas.

Changes in heating and ventilating.

Changes in sewerage system.

Employees' home.

Hospital ambulance.

OVERCROWDING.

Because of the necessity of enforced quarantine during a portion of this season, the census of the hospital seemed for a time to diminish, and the absence of the usual number of acute cases made the overcrowding in the acute service somewhat less apparent than usual. This, however, is now changed by the receipt of the patients that were cared for for us by the other hospitals, and the conditions of overcrowding are about as they were last year. This is particularly noticeable on the disturbed wards, the conditions there approximating to some slight extent because of this overcrowding and our rather too small number of attendants, something like the conditions of former days. Unless this overcrowding is taken care of, as has been repeatedly pointed out, these conditions must necessarily grow worse every year. An exact equilibrium of the disturbed and excited cases is never obtained in an institution of this kind, as these patients do not all alike and continuously become quiet as they reach a definite period in their residence in every hospital, and the consequence is that there are times, by reason of the large number of disturbed cases, when we are unable to give such care as we would like to them, and then conditions upon these wards are anything but ideal, and the work of the hardest, for such attendants as must take this detail. At such times the number of minor accidents, black eyes, etc., increase, and the very atmosphere of the hospital seems to change very radically for the worse. To be sure, there are ups and downs; sometimes we are better off than this and there is less noise and disturbance, but the fact remains true that much harm is done in this way, and such conditions should not be allowed to obtain any longer than is absolutely unpreventable.

The following changes have taken place in the past year: Resigned, Drs. Frederick E. Bowlby, Edwin G. Klein, Arthur P. Shellman and Anton R. Schier. The following were appointed during the year: Dr. Arthur P. Shellman and Dr. Louis T. Waldo. Dr. John W. Russell was promoted to the position of assistant physician during this period. The resignations of Dr. Shellman

and Dr. Schier were necessitated by the enforced reduction of wages and salaries that come at the end of the hospital year. Dr. Shellman was transferred to a vacancy as resident physician at the Soldiers and Sailors' Home, at Bath, N. Y., and Dr. Schier expected to travel. Dr. Klein left, expecting to engage in private practice.

EMPLOYEES.

The employees have all continued to give excellent service during the past year. The number of dismissals for cause have been relatively small, and this is a matter of considerable gratification, as I think it is an index to the faithfulness of the service performed by the employee. On the other hand, the number of changes by resignation has been very much larger than I wish would be the case, and to a considerable extent, in my opinion, for the reasons advanced in this report. The total number of resignations, dismissals and transfers for the year numbered one hundred and ninety-one (191); thirty-three added for reduction. Some of these changes were due, in part, to the restlessness that developed among the employees by reason of the restrictions enforced during the quarantining while we were suffering from the epidemic, and some were due to the fact that we had to reduce our help at the end of the year on account of our reduced appropriation.

ACKNOWLEDGMENTS.

Religious services of visitation have been performed during the past year, and our thanks in this work are due to Rev. H. A. Porter, Rev. C. W. McNish, Rev. Wesley Mason, Rev. Joseph W. Hendrick and Rev. J. A. Kennedy, all of Ovid.

Contributions of reading material have been received as follows:

- American Baptist Flag, St. Louis, Mo., 1 copy.
- Attica News, Attica, N. Y., 1 copy.
- Auburn Deutsch Zeitung, Auburn, N. Y., 2 copies.
- Auburn Weekly Bulletin, Auburn, N. Y., 1 copy.

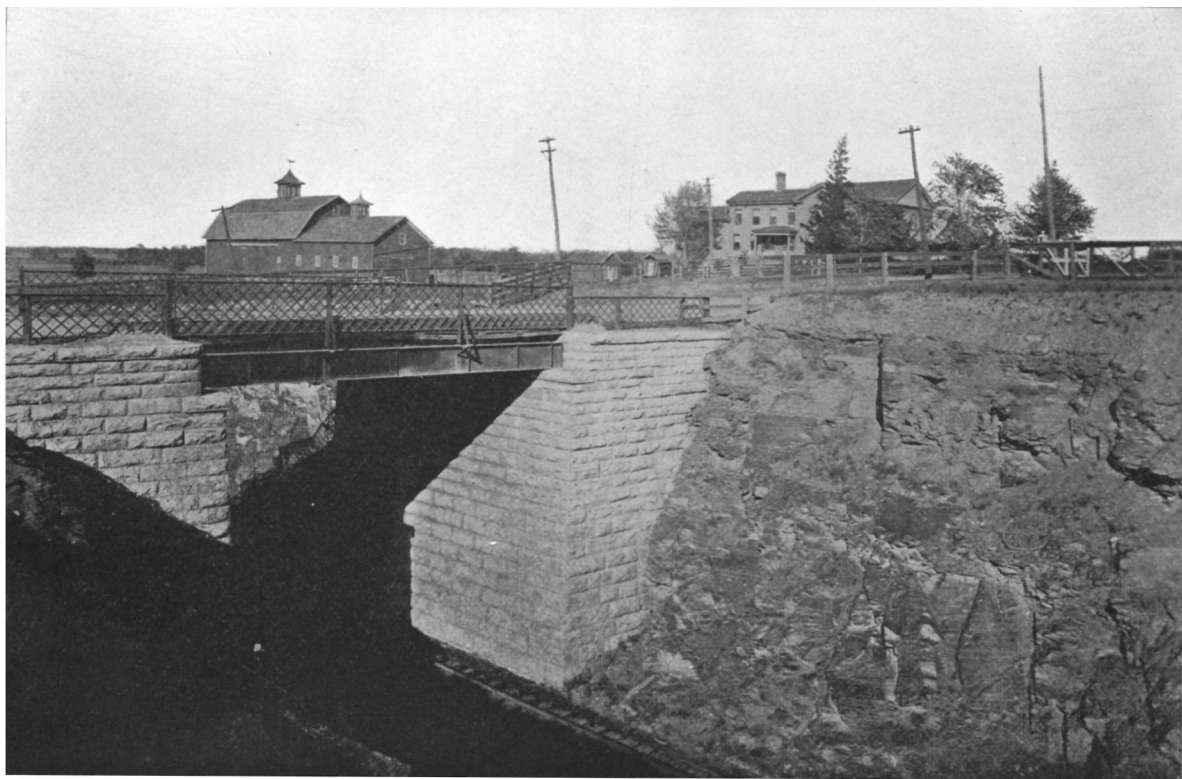
Auburn Democrat-Argus, Auburn, N. Y., 1 copy.
Allegany County Democrat, Wellsville, N. Y., 2 copies.
Albion Free Lance, Albion, N. Y., 1 copy.
Addison Advertiser, Addison, N. Y., 2 copies.
Addison Record, Addison, N. Y., 1 copy.
Batavia Daily News, Batavia, N. Y., 1 copy.
Batavian, Batavia, N. Y., 1 copy.
Cayuga Chief, Weedsport, N. Y., 1 copy.
Cohocton Times, Cohocton, N. Y., 1 copy.
Caledonia Advertiser, Caledonia, N. Y., 1 copy.
Castilian, Castile, Wyoming county, N. Y., 1 copy.
Catholic Journal, Rochester, N. Y., 1 copy.
Catholic Review, New York city, 1 copy.
Cayuga County Independent, Auburn, N. Y., 1 copy.
Christian Herald, New York city, 1 copy.
Clyde Democratic Herald, Clyde, N. Y., 1 copy.
Clyde Times, Clyde, N. Y., 1 copy.
Cuba Patriot, Cuba, N. Y., 1 copy.
Deaf-Mutes' Journal, New York city, 1 copy.
Dansville Advertiser, Dansville, N. Y., 1 copy.
Dryden Herald, Dryden, N. Y., 1 copy.
Farmer Review, Farmer, N. Y., 1 copy.
Geneva Advertiser, Geneva, N. Y., 1 copy.
Geneva Gazette, Geneva, N. Y., 1 copy.
Geneva Courier, Geneva, N. Y., 1 copy.
Groton and Lansing Journal, Groton, N. Y., 1 copy.
Holley Standard, Holley, N. Y., 1 copy.
Hammondsport Herald, Hammondsport, N. Y., 1 copy.
Hornellsville Times, Hornellsville, N. Y., 1 copy.
Hornellsville Weekly Tribune, Hornellsville, N. Y., 1 copy.
Hornellsville Evening Tribune, Hornellsville, N. Y., 1 copy.
Ithaca Daily News, Ithaca, N. Y., 1 copy.
Ithaca Democrat, Ithaca, N. Y., 1 copy.
Lake Shore News, Wolcott, N. Y., 1 copy.
Le Roy Gazette, Le Roy, N. Y., 1 copy.
Livonia Gazette, Livonia, N. Y., 1 copy.

Livingston Republican, Livingston, N. Y., 1 copy.
Montour Falls Free Press, Montour Falls, N. Y., 1 copy.
Mt. Morris Enterprise, Mt. Morris, N. Y., 1 copy.
New York Herald, New York city, 12 copies.
Naples Record, Naples, N. Y., 1 copy.
Orleans American, Albion, N. Y., 1 copy.
Oakfield Reporter, Oakfield, N. Y., 1 copy.
Ovid Gazette, Ovid, N. Y., 2 copies.
Ovid Independent, Ovid, N. Y., 2 copies.
Ontario County Times, Canandaigua, N. Y., 1 copy.
Ontario County Journal, Canandaigua, N. Y., 4 copies.
Perry Herald and News, Perry, N. Y., 2 copies.
Penn Yan Express, Penn Yan, N. Y., 1 copy.
Penn Yan Democrat, Penn Yan, N. Y., 1 copy.
Prattsburg News, Prattsburg, N. Y., 1 copy.
Rochester Morning Herald, Rochester, N. Y., 1 copy.
Seattle Post-Intelligence, Seattle, Washington, 1 copy.
Seneca County Courier, Seneca Falls, N. Y., 1 copy.
Seneca County Journal, Seneca Falls, N. Y., 1 copy.
Seneca County News, Waterloo, N. Y., 1 copy.
Seneca County News-Letter, Geneva, N. Y., 1 copy.
Seneca Falls Reveille, Seneca Falls, N. Y., 3 copies.
Southern Steuben Republican, Woodhull, N. Y., 1 copy.
Spirit of the Times, Batavia, N. Y., 1 copy.
Steuben Courier, Bath, N. Y., 1 copy.
Steuben Farmers' Advocate, Bath, N. Y., 1 copy.
Union Advertiser, Wayland, N. Y., 1 copy.
Union Springs Advertiser, Union Springs, N. Y., 1 copy.
Victor Herald, Victor, N. Y., 1 copy.
Waterloo Observer, Waterloo, N. Y., 1 copy.
Watkins Review, Watkins, N. Y., 1 copy.
Watkins Democrat, Watkins, N. Y., 1 copy.
Watkins Express, Watkins, N. Y., 1 copy.
Yates County Chronicle, Penn Yan, N. Y., 2 copies.



WYNKOOP HALLENBECK CRAWFORD CO.

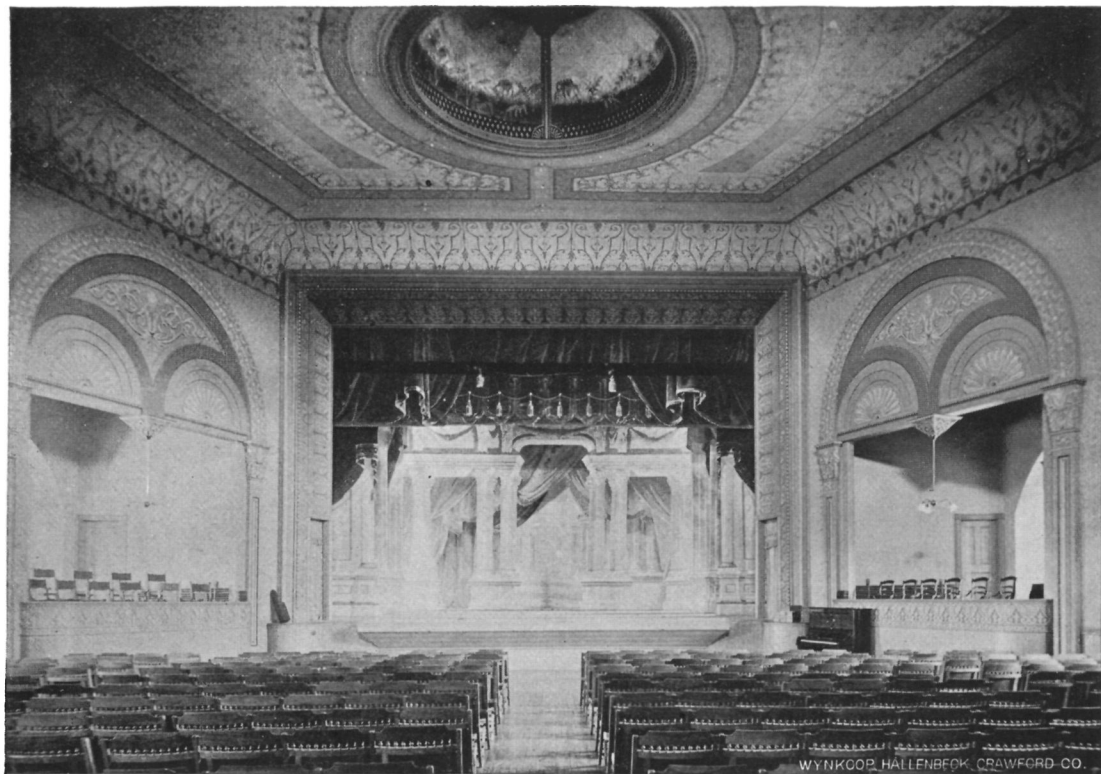
WILLARD STATE HOSPITAL.—BIRD'S-EYE VIEW LOOKING TOWARDS THE LAKE FROM THE BRANCH.



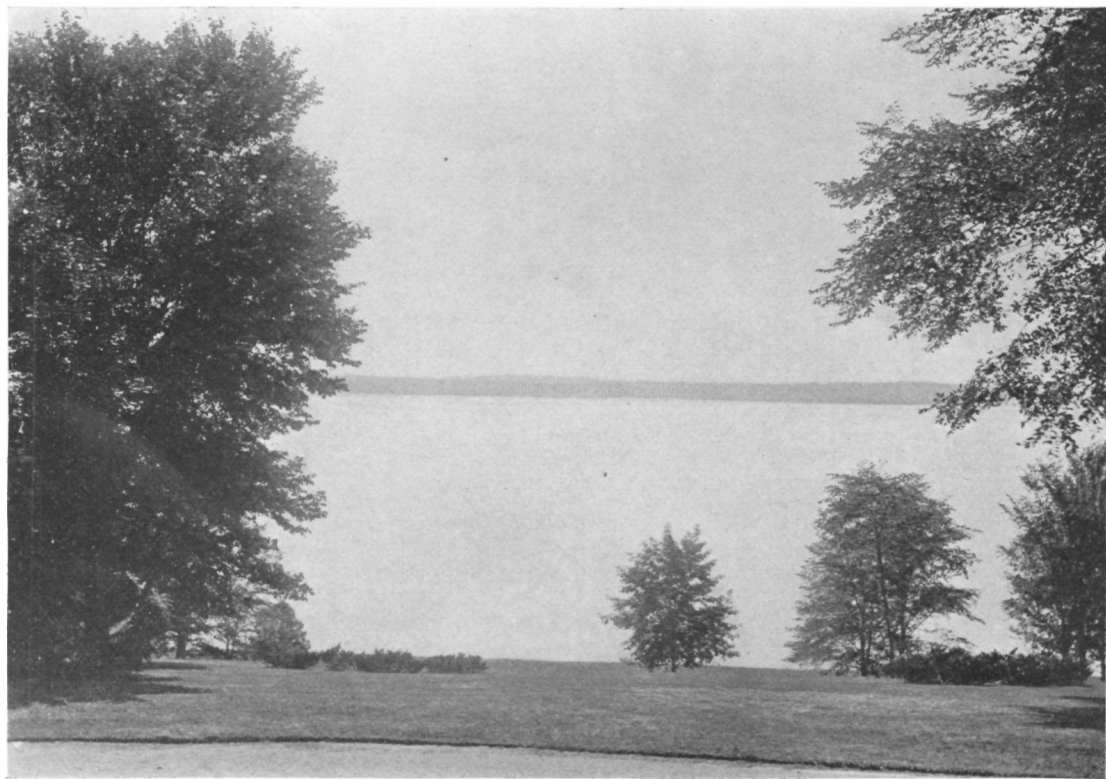
WILLARD STATE HOSPITAL.—VIEW OF "HILLSIDE" AT LEHIGH VALLEY RAILROAD CROSSING.



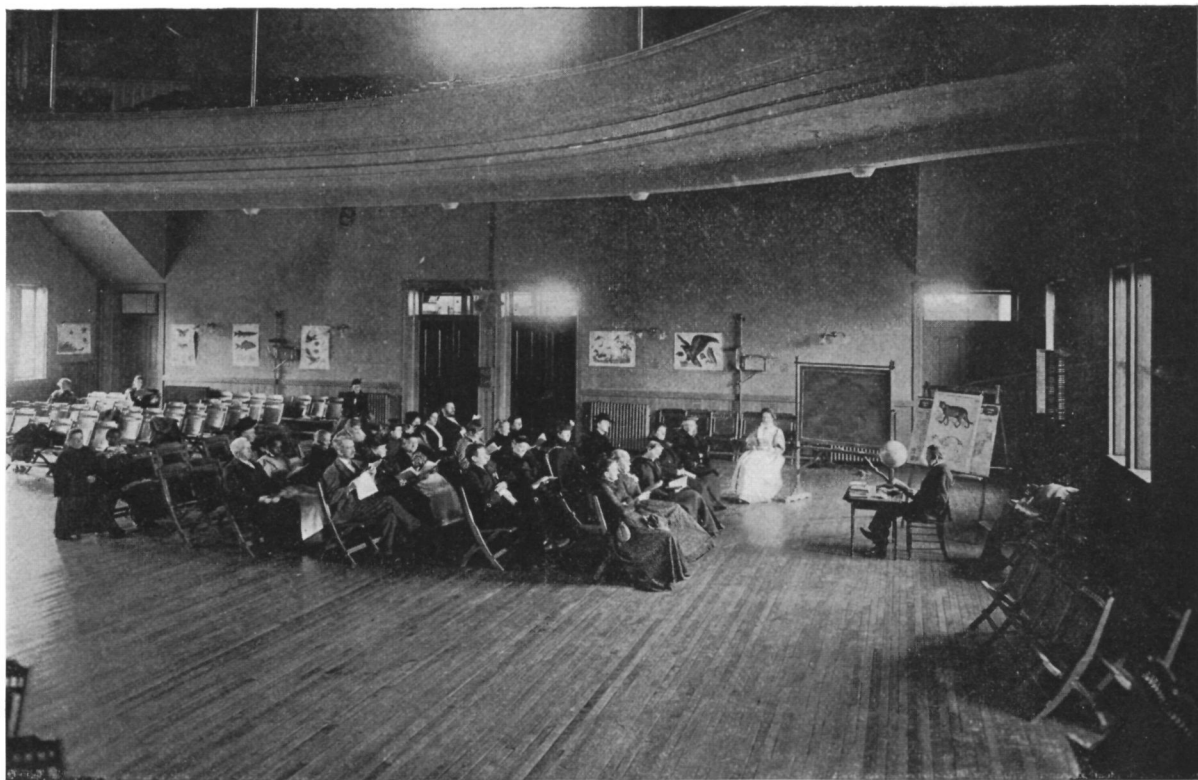
WILLARD STATE HOSPITAL.—AMUSEMENT HALL.



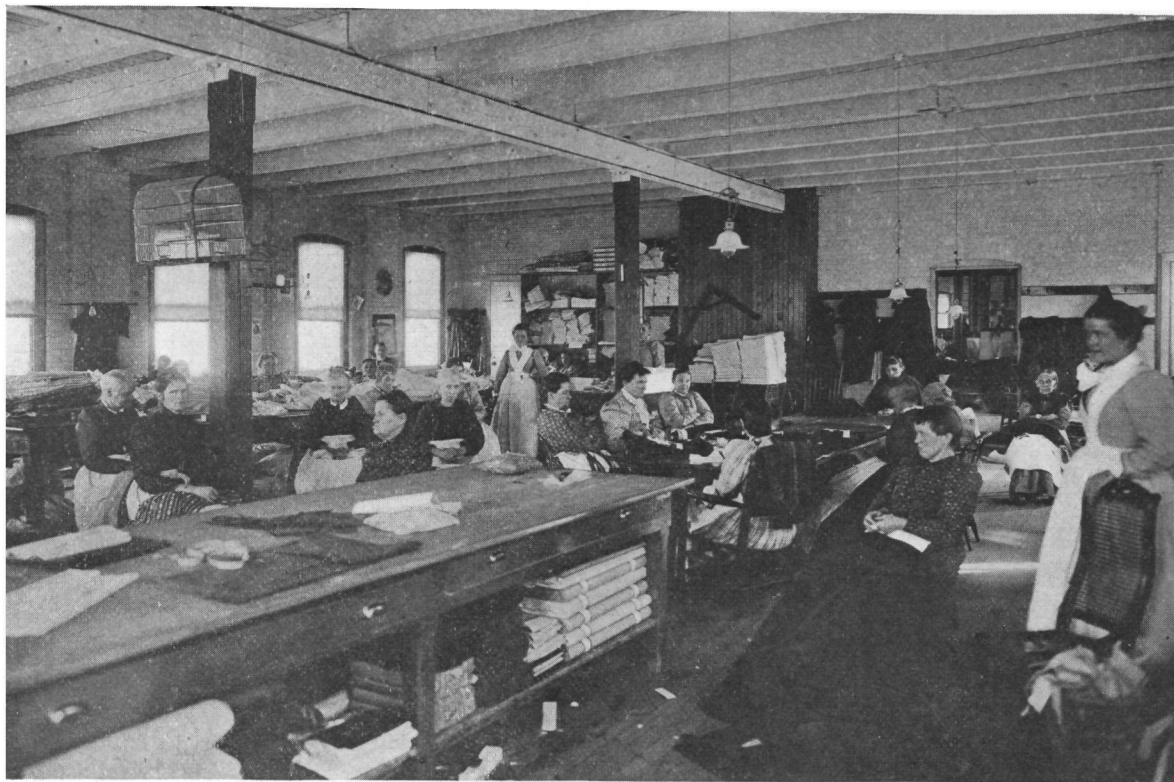
WILLARD STATE HOSPITAL.—INTERIOR OF AMUSEMENT HALL.



WILLARD STATE HOSPITAL.—VIEW OF THE LAKE FRONT AT THE MAIN BUILDING.



WILLARD STATE HOSPITAL.—SCHOOL FOR PATIENTS.



WILLARD STATE HOSPITAL.—SEWING ROOM.



WILLARD STATE HOSPITAL.--SHOEMAKER'S SHOP.

GENERAL.

I take great pleasure at this time in recording my sincere appreciation of the conscientious effort displayed by the officers of the hospital during this past year. The readiness of co-operation and the faithfulness of the officers of this hospital during the past year, particularly while self-sacrifice and extra effort was called for from all while the epidemic continued, well merits this special recognition, which is very sincerely given, and, while very much good work was done by all, I wish especially to mention the very persistent, trying and painstaking work, necessitating close application and long hours at the microscope, done by Dr. William Steinach, who expects soon to leave us to engage in private practice. Dr. Harlow Brooks, the associate in bacteriology in the State Pathological Institute, assisted us, as before mentioned, during our epidemic, and his work here was due to the courtesy of the director of the institute, as well as his own willingness to assist, and I think it right to include under this caption a special mention of his services to the hospital apart from what appears elsewhere, and express my thanks on behalf of the institution for the exceedingly close and painstaking work done by himself, Mrs. Brooks and their friend, Dr. Goeltz, in assisting us. As to the conduct of the practical matters connected with the epidemic, including the quarantine, the number of cultures taken, and many other matters of this character other than the purely laboratory work, I would state that the previous epidemic had given us much experience, but in arriving at decisions, in a great many of the small matters requiring the taking of a definite stand, and the placing of set limits, my thanks for such information as we did not possess are almost entirely due to Dr. Hermann M. Biggs of the New York city board of health, who I was able to freely consult, and who very courteously and kindly allowed me to take his time, in consultation over these matters.

We are also much indebted to the State Commission in Lunacy for the very ready assistance received from them during our epidemic, both officially and personally.

VISITATIONS.

The usual visitations were made by the Lunacy Commission, members of your Board, etc., during the year.

In conclusion, I beg to tender to your Board my sincere thanks for the ready co-operation, sympathy and assistance I have at all times found you ready to render.

Very respectfully,

WM. AUSTIN MACY,

Medical Superintendent.

REPORT OF THE TREASURER.

To the Board of Managers of Willard State Hospital:

The undersigned, the treasurer of the Willard State Hospital, respectfully submits the following statement of his receipts and payments for the year ending September 30, 1899:

Receipts.

Balance on hand, maintenance account..	\$4,828	22
Balance overpaid manufacturing account.	121	71
<hr/>		
Balance cash on hand September 30, 1898.....	\$4,706	51
Received from State Comptroller, maintenance account	346,060	91
Received from State Comptroller, special funds....	38,193	24
Received from State, reimbursing patients.....	19,651	56
Received from State, private patients.....	716	38
Received from M. J. Gilbert, steward's sales.....	1,394	19
Received from rents.....	110	00
Received from cash refunded, commutations, etc...	164	29
Received from interest on deposits.....	307	09
Received from manufacturing department.....	1,554	70
<hr/>		
Total receipts	\$412,858	87

Expenditures.

Paid vouchers from maintenance account.....	\$362,290	17
Paid vouchers from special funds.....	38,193	24
Paid vouchers from manufacturing fund.....	890	13
Paid sundry receipts, maintenance account, State Treasurer	10,445	56
Paid sundry receipts, manufacturing account, State Treasurer	542	86
Balance on hand, maintenance account.....	496	91
<hr/>		
Total	\$412,858	87

A portion of the receipts from the State Comptroller, on account of maintenance, for the last two months of the fiscal year, is under the provisions of the appropriation and supply bill of 1899, and the above balance is under the separate appropriation classified as follows:

Balance to salaries.....	\$40 00
Balance to wages.....	377 88
Balance to supplies.....	79 03
	<hr/>
	\$496 91
	<hr/>

All of which is respectfully submitted, by

J. B. THOMAS,

Treasurer.

Dated OVID, N. Y., *October 24*, 1899.

REPORT OF THE STEWARD.

To the Medical Superintendent:

The following report of the farm and garden products, stock on hand, articles manufactured, and the classification and summary of expenditures for maintenance, for the year ending September 30, 1899, is respectfully submitted.

FARM PRODUCTS.

Apples, 3,000 bushels, at 40 cents.....	\$1,200 00
Alfalfa hay, 15 tons, at \$6.....	90 00
Alfalfa, fed green, 30 tons, at \$2.....	60 00
Buckwheat, 100 bushels, at 45 cents.....	45 00
Beef, 11,209 pounds, at 6 cents.....	672 54
Corn, late, ear, 2,000 bushels, at 25 cents.....	500 00
Corn, sweet, ear, 560 bushels at 30 cents.....	168 00
Chickens, 2,056 pounds, at 10 cents.....	205 60
Corn fodder, 160 tons, at \$4.....	640 00
Corn stalks, 50 tons at \$2.50.....	125 00
Ducks, 162 pounds, at 10 cents.....	16 20
Eggs, 1,361 dozen, at 15 cents.....	204 15
Grapes, 16,000 pounds at 1 cent.....	160 00
Hay, 250 tons at \$8.....	2,000 00
Hides, 945 pounds, at 7 cents.....	66 15
Lamb, 607 pounds, at 10 cents.....	60 70
Milk, 106,341 gallons, at 10 cents.....	10,634 10
Mangel Wurzel, 10,000 bushels, at 20 cents.....	2,000 00
Oats, 2,500 bushels, at 30 cents.....	750 00
Pork, 41,736 pounds, at 5½ cents.....	2,295 48
Potatoes, 6,000 bushels, at 50 cents.....	3,000 00
Pumpkins, 35 loads, at \$1.....	35 00
Straw, wheat, 75 tons, at \$3.....	225 00
Straw, oats, 40 tons, at \$3.....	120 00
Turkeys, 450 pounds, at 14 cents.....	63 00
Wool, 206 pounds, at 18 cents.....	37 08
Wheat, 2,000 bushels, at 70 cents.....	1,400 00

\$26,773 00

GARDEN PRODUCTS.

Asparagus, 181 bushels, at \$1.50.....	\$271 50
Beans, lima, 80 bushels, at \$1.....	80 00
Beans, string, 426 bushels, at 25 cents.....	106 50
Beets, estimated, 2,100 bushels, at 25 cents.....	525 00
Cabbage, 36,000 heads, at 2 cents.....	720 00
Celery, 9,000 heads, at 3 cents.....	270 00
Carrots, estimated, 250 bushels, at 30 cents.....	75 00
Corn, sweet, 320 bushels, at 30 cents.....	96 00
Corn, pop, estimated, 30 bushels, at 50 cents.....	15 00
Cucumbers, 922 bushels, at 25 cents.....	230 50
Cauliflower, 1,000 heads, at 5 cents.....	50 00
Lettuce, 988 bushels, at 40 cents.....	395 20
Onions, green, 568 bushels, at 50 cents.....	284 00
Onions, 400 bushels, at 50 cents.....	200 00
Peas, 409 bushels, at 60 cents.....	245 40
Peppers, 18 bushels, at \$1.....	18 00
Parsnips, estimated, 400 bushels, at 35 cents.....	140 00
Pears, 12 bushels, at 40 cents.....	4 80
Peaches, 12 bushels, at \$1.....	12 00
Radishes, 343 bushels, at 50 cents.....	171 50
Raspberries, 1,494 quarts, at 6 cents.....	89 64
Rhubarb, 254 barrels, at 50 cents.....	127 00
Rutabagas, estimated, 1,200 bushels, at 25 cents....	300 00
Salsify, estimated, 20 bushels, at 50 cents.....	10 00
Squash, summer, 798 bushels, at 40 cents.....	319 20
Squash, hubbard, estimated, 400 bushels, at 40 cents.	160 00
Sage, 200 bunches, at 3 cents.....	6 00
Swiss Chard, 525 bushels, at 15 cents.....	78 75
Spinach, 625 bushels, at 12 cents.....	75 00
Tomatoes, estimated, 3,500 bushels, at 25 cents....	875 00
Turnips, estimated, 600 bushels, at 25 cents.....	150 00
	<hr/>
	\$6,100 99
All other products, sales and rents properly credited to farm and grounds.....	566 90
	<hr/>
Total farm and garden products.....	\$33,440 89
	<hr/>

Debit.

Amount charged farm and grounds as per treasurer's account	\$6,852 60
Amount of farm wages	5,289 03
All articles of produce that have been used as food for cows, hogs, sheep and fowls	8,704 20
Net profits to balance	12,595 06
	<hr/>
	\$33,440 89
	<hr/>

FARM STOCK.

Boars	4
Bulls	4
Calves	25
Cows	164
Chickens	367
Ducks	40
Geese	13
Horses	39
Colts	3
Heifers, 2-year old	5
Heifers, 1-year old	26
Hogs, fat	130
Mules	2
Sheep	28
Sows for breeding	39
Shoats	54
Pigs	30
Turkeys	75

ARTICLES MADE IN MATRON'S DEPARTMENT.

Aprons, patients'	2,563
Aprons, cook's	580
Aprons, colored	53
Bibs	342
Bath robes	64

Bureau covers	278
Blankets, quilted.....	15
Caps, misses'	454
Caps, cook's	99
Chemise	1,371
Curtains, holland	803
Curtains, cheese cloth	20
Cotton mats	73
Clothes bags	19
Dresses	2,872
Dresses, quilted	72
Dresses, worsted	39
Drawers, canton flannel.....	657
Drawers, cotton	589
Hose, knit.....	375
Laundry bags.....	30
Laundry squares	89
Night gowns	561
Napkins, hemmed	120
Mattress, ticks	156
Pillow cases, unbleached.....	1,992
Pillow cases, bleached.....	84
Pillow shams	69
Pillow ticks	110
Skirts, canton flannel.....	578
Skirts, cotton	485
Skirts, balmoral	15
Shirt waists	7
Sheets, unbleached	4,034
Sheets, bleached	241
Shoes, made	129
Shrouds	80
Shroud shirts	45
Shroud drawers	71
Shroud chemise	56
Shroud sheets	48

WILLARD STATE HOSPITAL.

41

Shroud pillow cases.....	66
Shirts, men's	2,138
Table cloths, patients'.....	477
Table cloths, center.....	16
Table spreads	25
Towels, patients'	7,376
Towels, dish	1,377

GARMENTS MADE IN TAILORING DEPARTMENT.

Coats	1,433
Caps, men's winter	144
Overcoats	136
Overalls	363
Overshirts	309
Pants	2,287
Straight suits	91
Suspenders	174
Ulsters, women's.....	71
Vests	1,201

ARTICLES MADE IN SHOE SHOP.

Awnings, for branch pr.....	11
Awnings, for office pr.....	2
Awning for boat.....	1
Chair cushions	10
Chairs, upholstered	19
Couches, upholstered	17
Collars, horse, faced new.....	20
Clothes sacks	239
Harness, double team, sets.....	2
Hame straps	75
Martingales	10
Mattresses	100
Straps, new in harness.....	200
Mattresses, double	10
Straps, breast	10

Straps, pole, double.....	3
Shoes, men's fine.....	330
Shoes, men's coarse.....	331
Slippers, men's	799
Shoes, women's	129
Rag carpet, yards.....	186
Boots, repaired, pairs.....	285
Shoes, repaired.....	1,300
Slippers, repaired	602
Shoes, women's, repaired.....	465
Mattresses, remade	875
Pillows, remade	1,000

And all harness repairs.

ARTICLES MADE IN TIN SHOP.

Ash pail for yacht.....	1
Basins, wash	54
Bird cages	12
Boilers, wash	4
Box, perforated tin	1
Baskets, wire	4
Basin, wash	1
Bathing dish	1
Book rests	6
Box, tin	1
Basket, wire	1
Book rests	4
Boat pump	1
Coffee pots, dozen.....	2
Cups, drinking	150
Cans, oil	4
Cans, oil, five-gallon.....	1
Cans, milk	2
Chimney ventilator.....	1
Cans, milk	2

Canisters, coffee and tea.....	6
Canisters, sugar	6
Cans, tea	3
Coffee filler, copper.....	1
Can, ice, for water tank.....	1
Can, five gallon oil.....	1
Cans, swill	2
Cover for scuttle	1
Cups, apothecary	12
Coat hangers	25
Cover, tin	1
Conductor pipe, 2-foot.....	4
Cover on steam kettle	1
Cans, bread and lard.....	2
Cans, lard.....	2
Cover for steam kettle.....	1
Dippers, one-quart	4
Dippers, two-quart	4
Dippers, for paint shop.....	3
Drip troughs	3
Drip pan, for ice box.....	1
Dipper, six-quart.....	1
Dipper, large, for laundry.....	1

ARTICLES MADE IN TIN SHOP.

Eavestroughs ft.....	213
Eavestrough conductor, feet.....	70
Elbows, 3-inch	15
Elbows, 2-inch	3
Exhaust pipe	1
Eavestrough, feet.....	20
Elbow	1
Elbow for cellar.....	4
Funnels.....	4
Funnel.....	1
Funnel, double	1

Fire-pot	1
Filter, coffee	1
Fumigating tubs	3
Glue-pot	1
Hods, coal	29
Hod, coal, for engine	1
Inhalers, 3-quart	4
Kettles, covered	3
Moulds, ice cream	2
Moulds, ice cream	4
Muzzles, for horses	2
Pans, 10-quart, dozen	9
Pans, 6-quart, dozen	6½
Pails, 12-quart, dozen	7 1-3
Pails, 10-quart, dozen	1 1-12
Pans, dish, dozen	1
Pans, 21-quart, dozen	7
Pails, covered, 3-quart, dozen	1
Pails, covered, 4-quart, dozen	½
Pan, strainers, dozen	½
Pans, dust, dozen	6
Pails, galvanized, dozen	1½
Pan, galvanized	1
Pails, special diet	4
Pans, dripping	6
Pan, drip, for water tank	1
Pipe, galvanized, feet	40
Pump, for scow	1
Pans, dripping, for infirmary	3
Pans, dripping	2
Pails	2
Pails, large, lard	6
Pans, dripping	3
Pans, dripping	3
Pan, galvanized	1
Pipe, ventilating	1

Pipe, feet	47
Pails, covered	6
Pail, green, etc.....	1
Pans, milk	4
Pan top, for glue heater.....	1
Pipe, galvanized, 6-inch, feet.....	34
Pail, galvanized	1
Pipe, exhaust	1
Pan, ash	1
Pails, large, covered, 6-gallon.....	2
Pails, bread, covered, 5-gallon.....	2
Pump in oil tank.....	1
Skimmers, dozen	2
Strainers, dozen	$\frac{1}{2}$
Scoops, sugar, dozen.....	$\frac{1}{2}$
Sieves, flour, dozen.....	$\frac{1}{2}$
Stencils.	4
Steamers, pudding	3
Sterilizing cans	2
Sterilizers, for operating room.....	3
Safes for tents.....	3
Strainer, yeast	1
Stovepipe, for greenhouse.....	1
Sieve.	1
Sewer guards	3
Shades, electric	16
Sprinklers, 12-quart	2
Shield, for light.....	1
Splasher, to sink, Hadley Hall.....	1
Spray, for coffee urn.....	1
Sieve, flour	1
Slopcan.	1
Swillcan.....	1
Teakettle.....	1
Tin graters, dozen.....	$\frac{1}{2}$
Tin roofing, square feet.....	425

Teakettle, copper.....	1
Tin, cake set.....	1
Tea urn funnel.....	1
Tins, special diet.....	2
Tins, attendants' mess.....	6
Tins, cake	18
Tin roofing, square feet.....	500
Tin, valley, feet.....	24
Tin, shingle, feet.....	40
Teakettle, large	1
Teakettles, copper	2
Tins, pie	6
Tins, cake	6
Tins, cake	8
Tees.	4
Washboilers.....	4

ARTICLES MADE IN BROOM SHOP.

Brooms, house, dozen.....	205
Brooms, stable, dozen.....	2½
Brooms, whisk, dozen.....	3
Bags, sock, dozen.....	12
Baskets, wash, dozen.....	6 5-6
Baskets, large, square, dozen.....	1-3
Baskets, hand, dozen.....	1-12
Baskets, half-bushel, dozen	2
Brushes, scrubbing, dozen.....	16½
Brushes, hair, dozen.....	9 1-3
Brushes, bathing, dozen.....	2 7-12
Brushes, shoe, dozen.....	2 1-6
Brushes, wall, dozen.....	5-12
Chairs, repaired	112
Doormats, dozen	4 1-3
Hampers, clothes, dozen.....	1 2-3
Polishers, floor, dozen.....	17 1-4

MAINTENANCE.

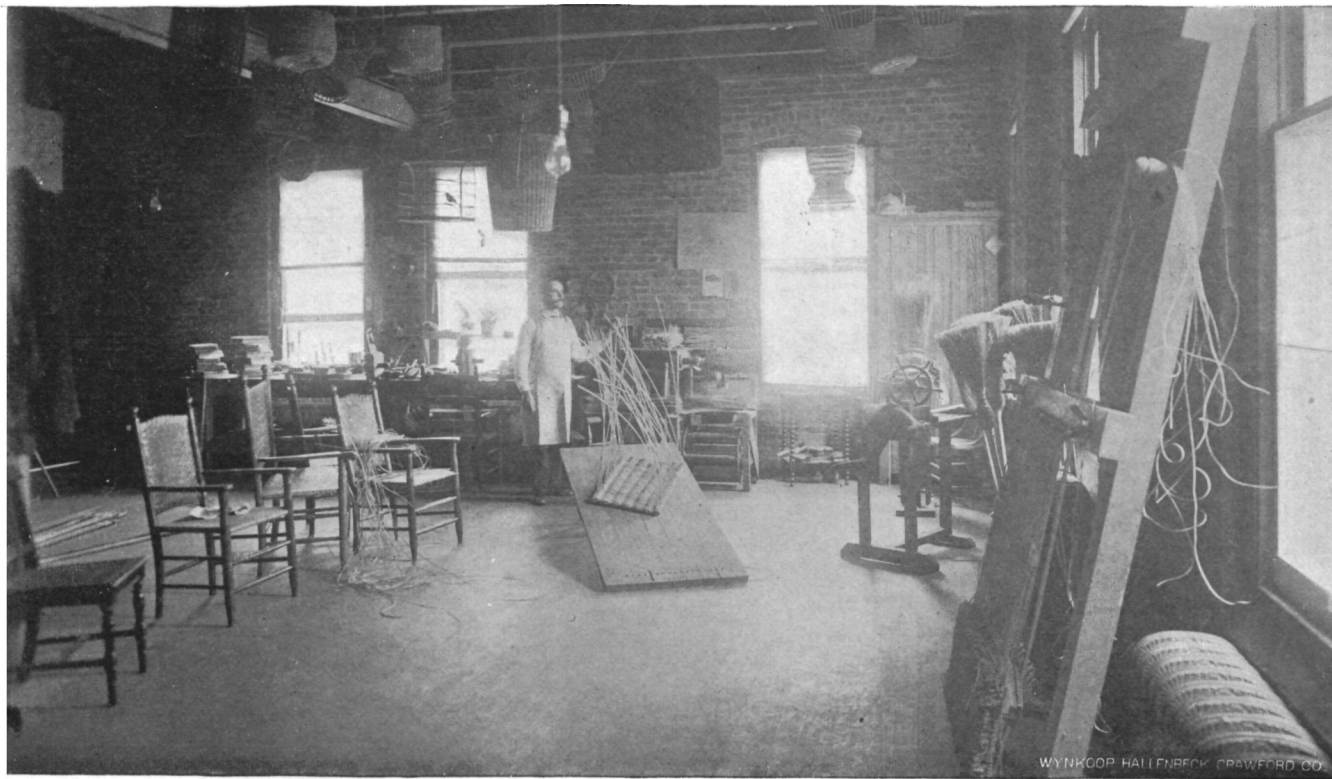
	Total cost.	Per capita.
Officers' salaries	\$21,236 25	\$0.181
Wages.	144,123 98	1.231
Provisions and stores.....	109,773 03	.938
Ordinary repairs	9,317 44	.080
Farm and grounds.....	7,240 80	.062
Clothing.....	21,044 37	.180
Furniture and bedding.....	6,965 45	.059
Books and stationery.....	2,106 13	.018
Fuel and light.....	22,576 44	.193
Medical supplies	4,311 52	.037
Miscellaneous expenses	10,911 14	.093
Transportation of patients.....	2,683 62	.023
	<hr/>	<hr/>
	\$362,290 17	\$3.095
	<hr/>	<hr/>

STATISTICAL TABLES

TABLE No. 1

Showing movement of population for the year ending September 30,
1899

	Men	Women	Total
Remaining October 1, 1898	1,115	1,141	2,256
Admitted during year ending Sept. 30, 1899:			
On original commitments—			
From residences.....	100	81	181
By transfers from county houses.....	10	3	13
By transfers from other institutions for insane.	18	44	62
Total number under treatment during year.	1,243	1,269	2,512
Daily average population	1,102	1,149	2,251
Capacity of institution	1,111	1,169	2,280
Discharged during the year:			
As recovered.....	31	26	57
As improved.....	25	21	46
As unimproved.....	7	3	10
As not insane	3	.....	3
Died	76	67	143
Whole number discharged during the year.....	142	117	259
Remaining October 1, 1899	1,101	1,152	2,253



WILLARD STATE HOSPITAL.—INTERIOR OF BRUSH, BROOM AND BASKET MAKING ROOM.

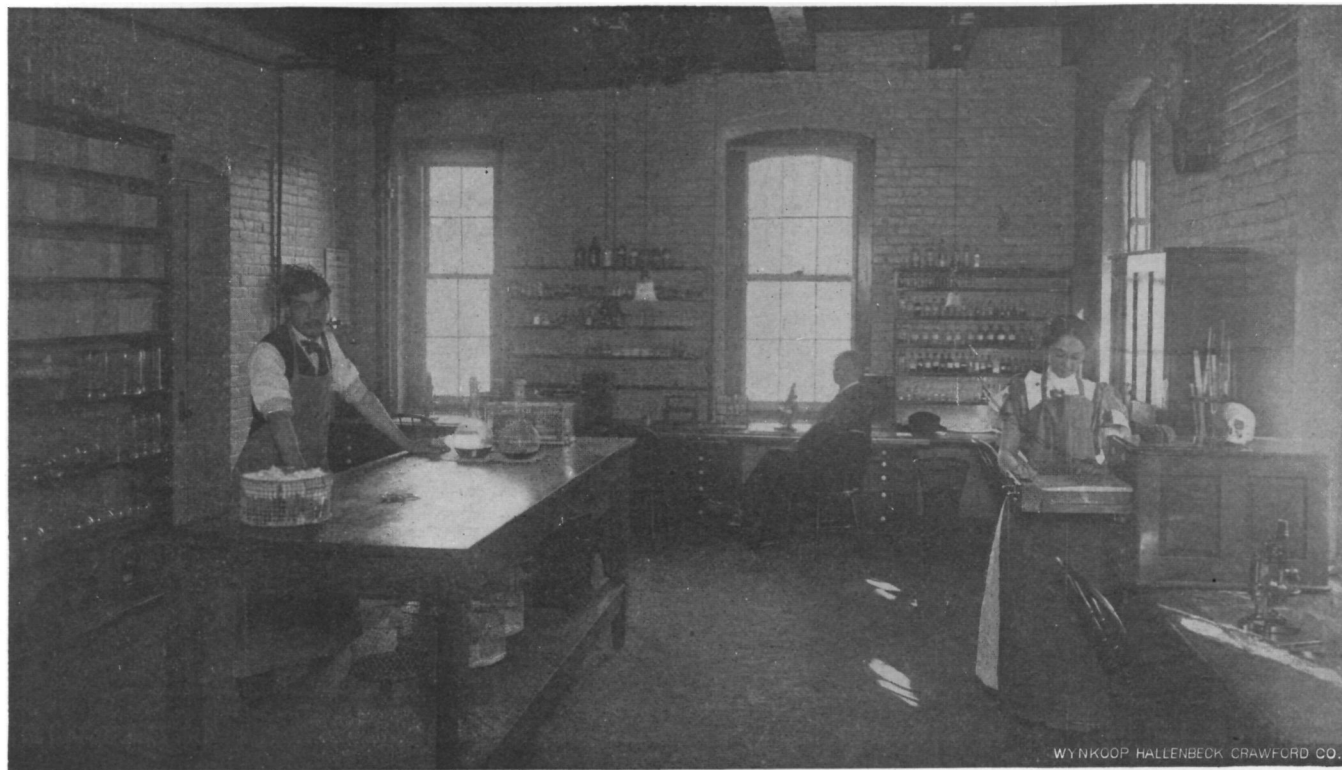


WILLARD STATE HOSPITAL.—BASKET, MAT AND BRUSH SHOP.



WYNKOOP HALLENBECK CRAWFORD CO.

WILLARD STATE HOSPITAL.—INTERIOR OF SHOE-SHOP.

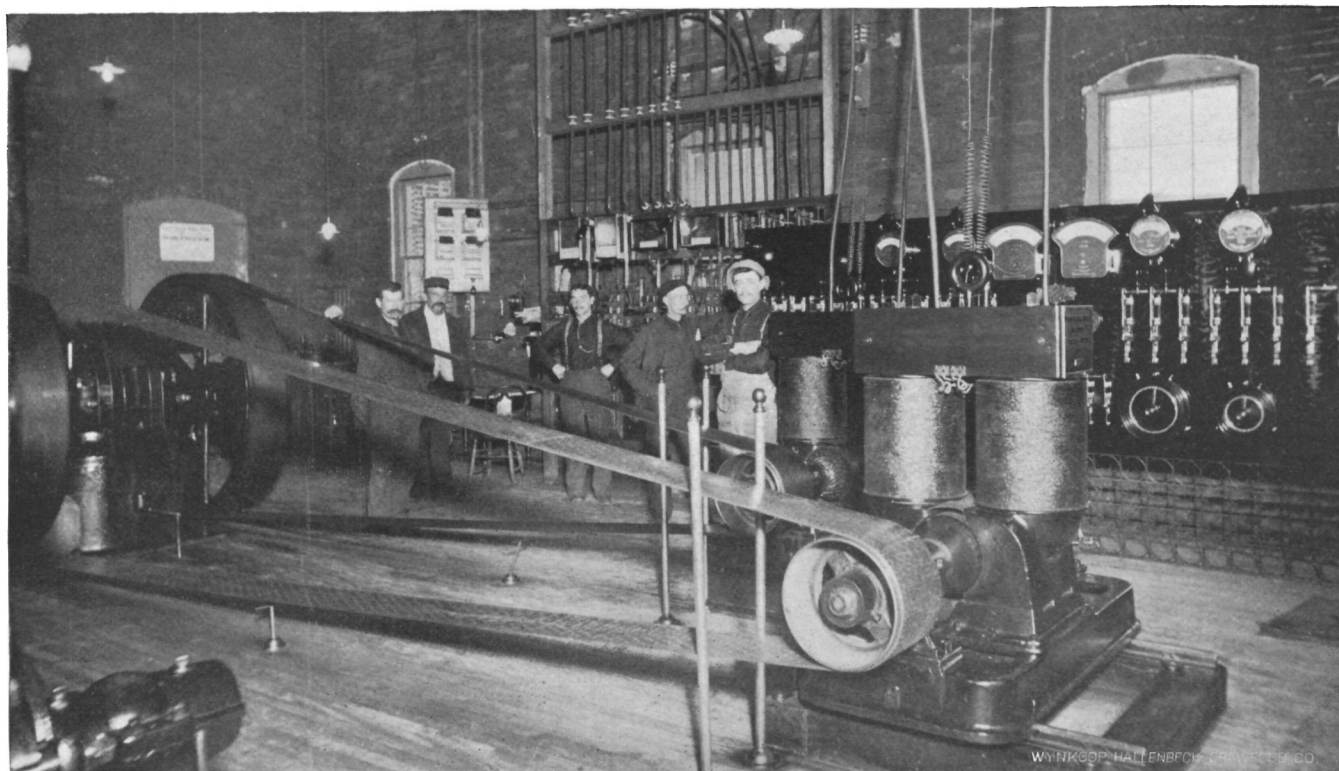


WYNKOOP HALLENBECK CRAWFORD CO.

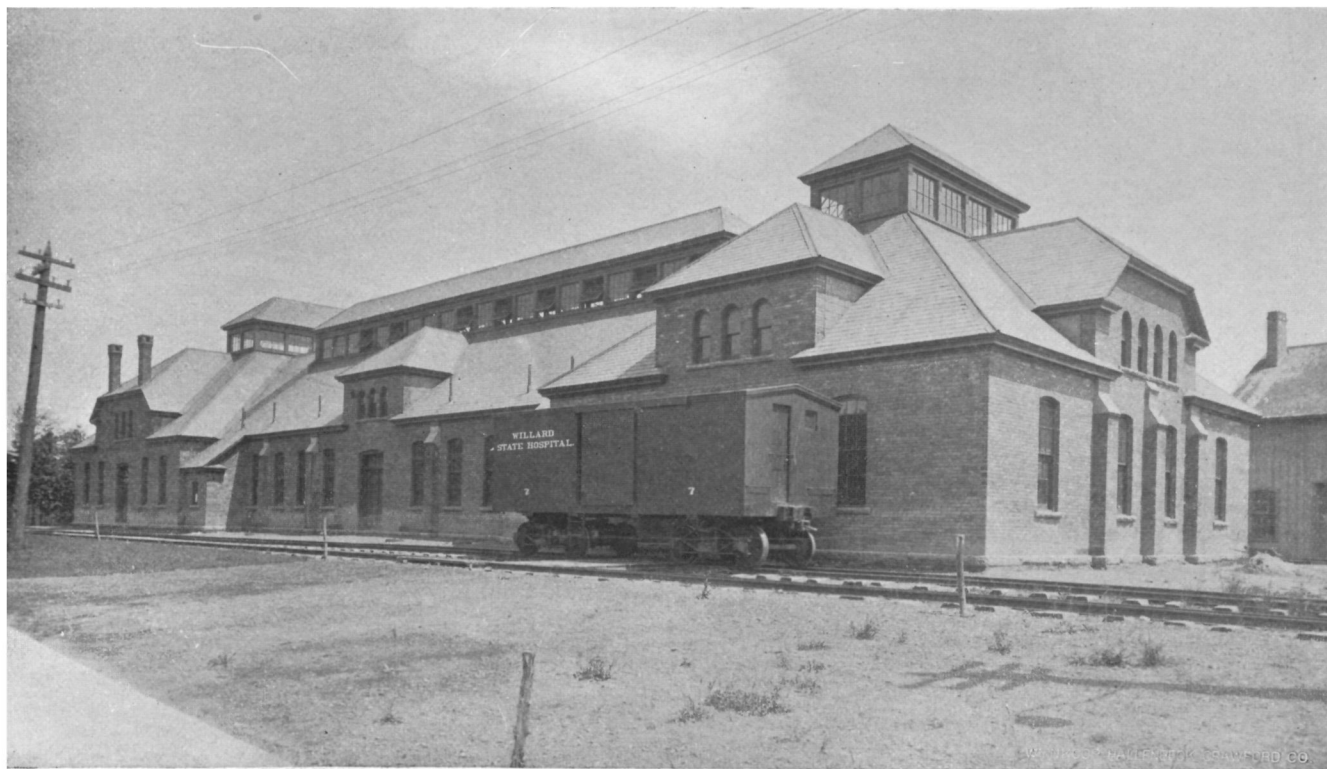
WILLARD STATE HOSPITAL.—INTERIOR OF LABORATORY.



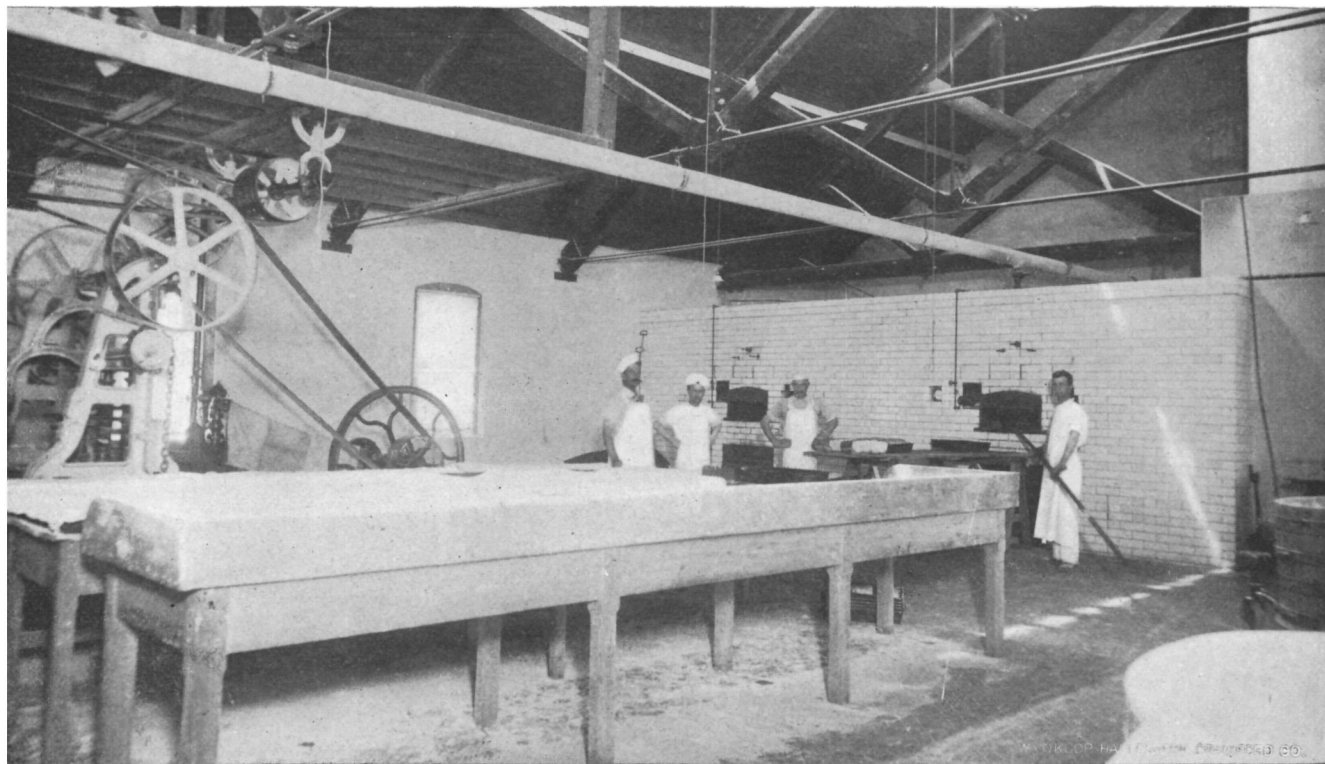
WILLARD STATE HOSPITAL.—STOREROOM.



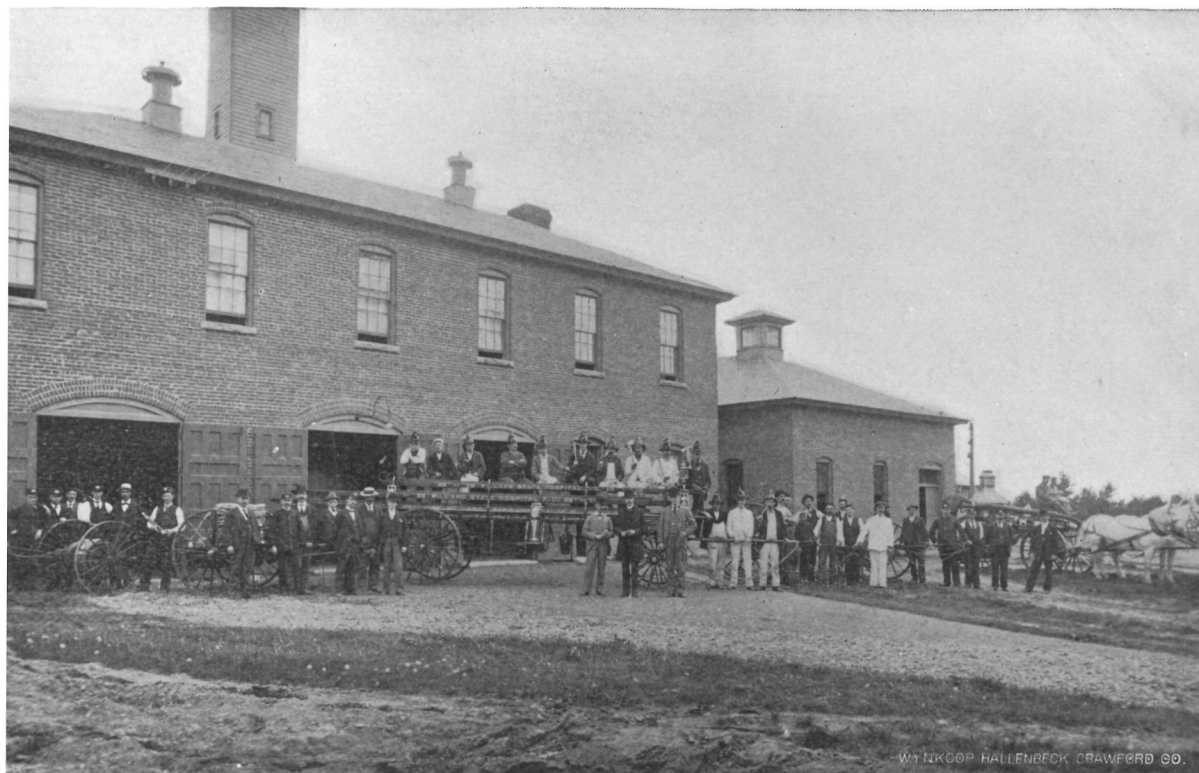
WILLARD STATE HOSPITAL.—ELECTRIC LIGHT PLANT.



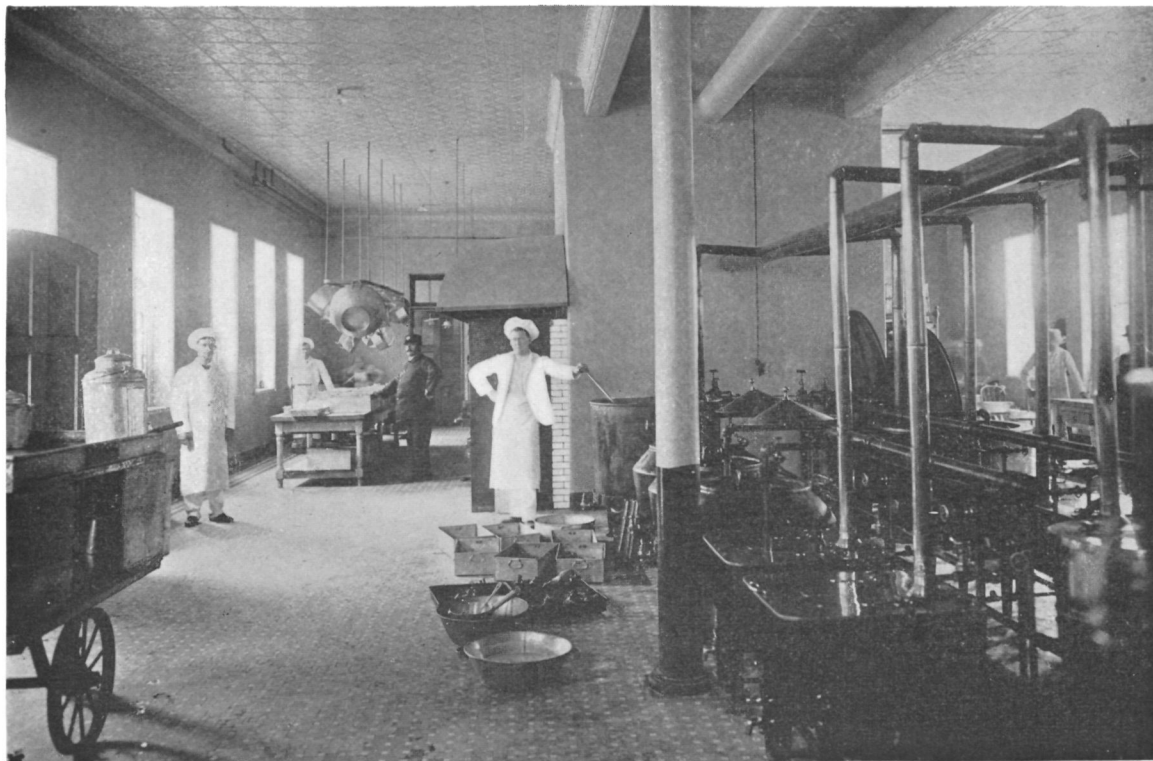
WILLARD STATE HOSPITAL.—LAUNDRY.



WILLARD STATE HOSPITAL.—INTERIOR OF BAKERY.



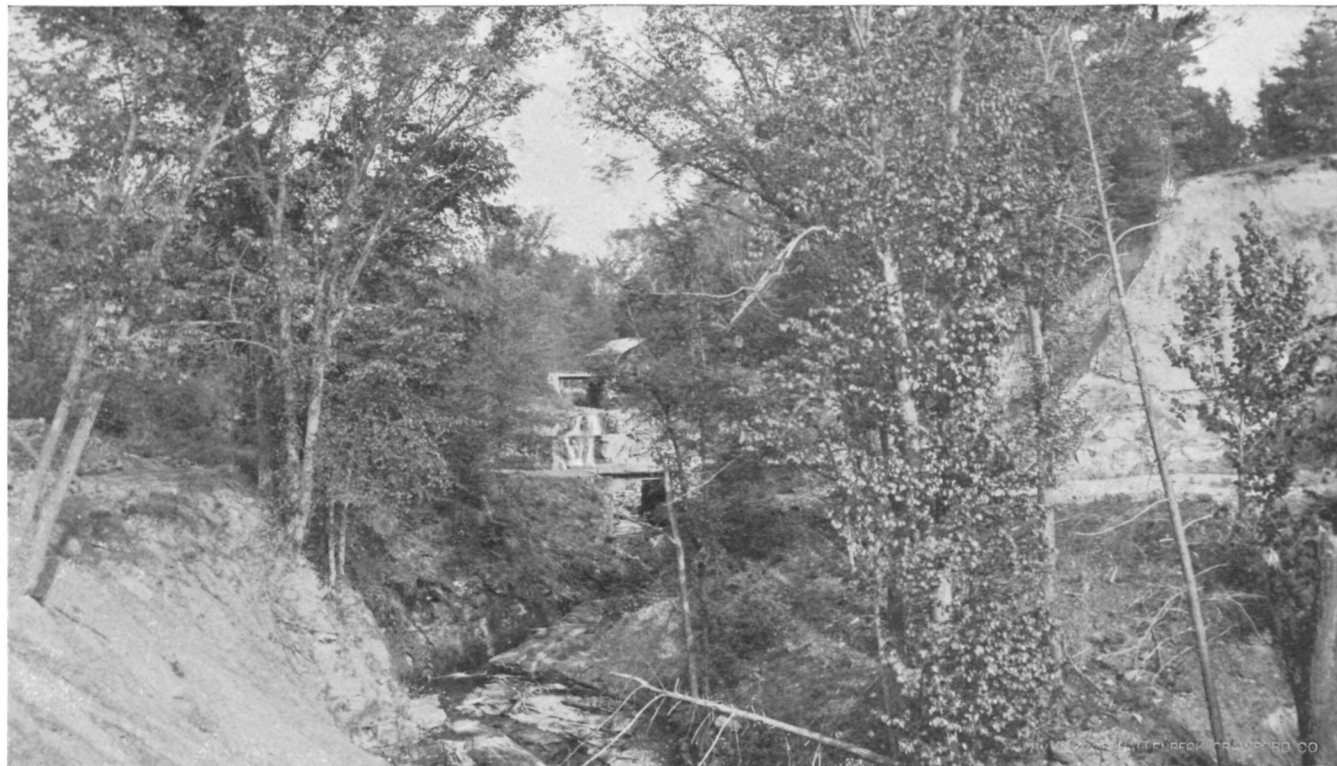
WILLARD STATE HOSPITAL.—FIRE COMPANY AND FIRE ENGINE HOUSE.



WILLARD STATE HOSPITAL.—MAIN KITCHEN.



WILLARD STATE HOSPITAL.—LAKE VIEW IN FRONT OF HOSPITAL.



WILLARD STATE HOSPITAL.—A GLIMPSE OF THE RAVINE.



WYNKOOP HALLENBECK CRAWFORD 90.

WILLARD STATE HOSPITAL.—AFTERNOON VIEW FROM FRONT OF MAIN BUILDING.



WILLARD STATE HOSPITAL.—VIEW OF SENECA LAKE SOUTH OF MAIN BUILDING.



WILLARD STATE HOSPITAL.—TEAMS AT THE BARN.



WILLARD STATE HOSPITAL.—A PORTION OF THE HOLSTEIN HERD.

TABLE No. 2

October 1, 1898, to September 30, 1899

Date of opening.....	1869
Total acreage of grounds and buildings.....	1,107
Value of real estate, including buildings. (This amount represents 5 per cent. less than reported last annual report.).....	\$1,396,243 52
Value of personal property.....	214,350 63
Acreage under cultivation.....	750

Receipts during year, maintenance fund:

Balance on hand October 1, 1898.....	\$4,828 22
From State treasury, for maintenance, on estimates 1 to 12, inclusive.....	346,060 91
From private patients.....	716 38
From reimbursing patients.....	19,651 56
From all other sources.....	1,975 57
Total receipts for maintenance.....	\$373,232 64

Total receipts from State Commission in Lunacy for extraordinary improvements, chapters 636-

570.....	\$38,193 24
Total receipts from manufacturing fund.....	1,554 70

Disbursements during year for maintenance:

Estimate No. 1. For officers' salaries.....	\$21,236 25
Estimate No. 2. For wages.....	145,123 98
Estimate No. 3. For provisions and stores.....	109,773 03
Estimate No. 4. For ordinary repairs.....	9,317 44
Estimate No. 5. For farm and grounds.....	7,240 80
Estimate No. 6. For clothing.....	21,044 37
Estimate No. 7. For furniture and bedding.....	6,965 45
Estimate No. 8. For books and stationery.....	2,106 13
Estimate No. 9. For fuel and light.....	22,576 44

Table No. 2—(Continued).

Estimate No. 10. For medical supplies.....	\$4,311 52
Estimate No. 11. For miscellaneous expenses....	9,911 14
Estimate No. 12. For transportation	2,683 62

Total disbursements, estimates 1 to 12, inclusive.	<u>\$362,290 17</u>
---	---------------------

Sundry receipts, State Treasurer, chapter 580, Laws 1899	\$10,445 56
---	-------------

Total disbursements during year for extraordinary improvements under apportionments by State Commission in Lunacy.....	38,193 24
--	-----------

Total disbursements during year, manufacturing fund.	1,011 84
--	----------

Sundry receipts, State Treasurer.....	*542 86
---------------------------------------	---------

Balances October 1, 1899:

General maintenance fund.....	\$496 91
-------------------------------	----------

Balance of \$496.91 classified as

Salaries	\$40 00
Wages	377 88
Supplies	79 03
	<u>\$496 91</u>

Apportionments by State Commission in Lunacy for extraordinary improvements.....	None
---	------

Manufacturing fund	None
--------------------------	------

Weekly per capita cost on daily average number of patients, estimates 1 to 12, inclusive.....	<u>\$3.095</u>
--	----------------

Maximum rate of wages paid attendants:

Men.....	\$33 00
----------	---------

Women.....	28 00
------------	-------

Minimum rate of wages paid attendants:

Men.....	20 00
----------	-------

Women.....	14 00
------------	-------

* This item includes \$121.71 reported last year, as balance overpaid.

Table No. 2—(Concluded).

Proportion of day attendants to average daily population.	1 to 10.61
Proportion of night attendants to average daily population.	1 to 60.83
Percentage of daily patient population engaged in some kind of useful occupation.	50.49
<hr/>	
Estimated value of farm and garden products during year	\$32,864 04
Estimated value of articles made or manufactured by patients during year.	25,738 89
<hr/>	

TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

	YEAR ENDING SEPTEMBER 30, 1899			INHERITED PREDISPO- SITION			Unascertained
	Men	Women	Total	Men	Women	Total	
Moral:							
Adverse conditions (such as loss of friends, business troubles, etc.)	7	13	20	2	5	7	....
Mental strain, worry and overwork (not in- cluded in above).....	7	6	13	3	2	5	....
Religious excitement....	....	2	2	....	1	1	....
Love affairs (including seduction) .....	....	1	1	....	....	....	....
Fright and nervous shock. ....	....	3	3	....	....	....	....
Physical:							
Intemperance	27	4	31	5	1	6	7
Sexual excess	1	1	2	....	....	....	....
Venereal diseases	1	....	1	1	....	1	....
Masturbation	7	....	7	4	....	4	1
Sunstroke	1	....	1	....	....	....	....
Accident or injury	2	2	4	....	....	....	2
Pregnancy .....	....	2	2	....	1	1	....
Parturition and puerpe- rium .....	....	2	2	....	....	....	1
Change of life .....	....	11	11	....	1	1	1
Fevers	1	....	1	1	....	1	....
Privation and overwork	3	2	5	2	1	3	....
Epilepsy	6	1	7	1	....	1	....
Diseases of skull and brain	2	1	3	....	....	....	1
Old age	12	10	22	3	1	4	3
Epidemic influenza....	2	....	2	1	....	1	....
Abuse of drugs .....	....	1	1	....	....	....	....
All other bodily dis- orders and ill health.	4	10	14	....	1	1	2
Heredity	11	24	35	11	24	35	....
Congenital defect	4	7	11	....	....	....	3
Unascertained	27	25	52	11	6	17	15
Not insane	3	....	3	....	....	....	....
Total	128	128	256	45	44	89	36

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1899, and since October 1, 1888

FORM	YEAR ENDING SEPTEMBER 30, 1899			SINCE OCTOBER 1, 1888		
	Admitted	Recovered	Died	Admitted	Recovered	Died
Mania, acute delirious.....	.....	.....	.....	2	.....	2
Mania, acute.....	23	20	7	495	212	64
Mania, recurrent.....	5	3	1	66	24	12
Mania, chronic.....	6	.....	23	503	23	249
Melancholia, acute.....	74	29	8	725	243	148
Melancholia, chronic.....	37	5	13	456	30	111
Alternating (circular) insanity.....	1	.....	.....	3	.....	.....
General paralysis.....	15	.....	12	130	.....	104
Dementia, primary.....	1	.....	.....	4	.....	.....
Dementia, terminal.....	75	.....	71	1,586	.....	835
Epilepsy with insanity...	8	.....	6	176	.....	147
Imbecility with maniacal attacks.....	8	.....	2	96	.....	16
Idiocy.....	.....	.....	.....	37	.....	15
Not insane*	3	.....	.....	13	.....	.....
Total.....	256	57	143	4,292	532	1,703

* Includes cases of alcoholism, drug habit, etc.

Table No. 5—(Continued)

CURABLE CONDITIONS		LENGTH OF INTERVAL OF COMPLETE IMMUNITY FROM SYMPTOMS OF INSANITY IN CASES PREVIOUSLY DISCHARGED RECOVERED—NOW READMITTED																	
		UNDER 3 MONTHS		FROM 3 MONTHS TO 1 YEAR		FROM 1 TO 2 YEARS		FROM 2 TO 3 YEARS		FROM 3 TO 4 YEARS.		FROM 4 TO 5 YEARS		BETWEEN 5 AND 10 YEARS		AVERAGE LENGTH OF IMMUNITY			
		Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	MEN		WOMEN	
																Years	Months	Years	Months
Melancholia in acute forms.	First ad- mission.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Second ad- mission.	.....	.....	1	.....	1	.....	.....	2	.....	1	.....	.....	.....	1	1	4	4	6
	Third ad- mission.	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	6
Mania in acute forms.	First ad- mission.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Second ad- mission.	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
	Third ad- mission.	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	.....	6
All other cur- able forms.	First ad- mission.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Second ad- mission.	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
	Third ad- mission.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE No. 6

Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1899						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month	13	11	24	.....	.....	.....	98	78	176	2	.....	2
One to three months.....	8	8	16	3	.....	3	60	69	129	43	16	59
Three to six months.....	3	3	6	15	9	24	41	46	87	95	69	164
Six to nine months.....	1	.....	1	3	8	11	14	12	26	45	54	99
Nine months to one year.....	.....	.....	.....	1	5	6	7	11	18	30	44	74
One year to eighteen months	3	2	5	4	1	5	13	7	20	36	33	69
Eighteen months to two years.....	.....	.....	.....	1	1	2	9	8	17	7	11	18
Two to three years.....	2	.....	2	2	.....	2	11	8	19	10	18	28
Three to four years.....	.....	.....	.....	.....	.....	.....	3	2	5	3	6	8
Four to five years.....	.....	2	2	.....	.....	.....	.....	3	3	2	1	4
Five to ten years.....	.....	.....	.....	2	2	4	4	6	10	3	3	6
Ten to twenty years.....	.....	.....	.....	.....	.....	.....	2	2	4	.....	1	1
Unascertained	1	.....	1	.....	.....	.....	14	4	18	.....	.....	.....
Total.....	31	26	57	31	26	57	276	256	532	276	256	532

TABLE No. 7

Showing the causes of death of patients who died during the current year and since October 1, 1888

CAUSE OF DEATH	YEAR ENDING SEP- TEMBER 30, 1899			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Specific infectious diseases:						
Typhoid fever		1	1	3	5	8
Influenza				1	5	6
Erysipelas				4	9	13
Septicemia and pyemia	1	....	1	8	4	12
Dysentery	1	3	4	9	10	19
Tuberculosis	14	10	24	144	219	363
Constitutional diseases:						
Diabetes mellitus and diabetes in- sipidus				1	1	2
Scurvy, purpura and hæmophilia		1	1	....	1	1
Diseases of the digestive system:						
Mouth, salivary glands, pharynx, tonsils and œsophagus				3	....	3
Diseases of the stomach				2	3	5
Diseases of the intestines	2	7	9	38	53	91
Diseases of the liver				3	2	5
Diseases of the peritoneum	2	1	3	10	8	18
Diseases of the respiratory system:						
Diseases of the bronchi				5	1	6
Diseases of the lungs	9	14	23	122	117	239
Diseases of the pleura				2	2	4
Diseases of the circulatory system:						
Diseases of the pericardium		1	1	2	2	4
Diseases of the heart	12	13	25	98	95	193
Aneurism				1	1	2
Diseases of the blood and ductless glands:						
Anemia, pernicious anemia and lœukemia		2	2	....	3	3
Diseases of the genito-urinary system	13	2	15	70	39	109
Diseases of the nervous system:						
Diseases of the spinal cord				4	....	4
Diseases of the meninges	1	1	2	5	5	10
Organic diseases of the brain (tumor, abscess, embolism, thrombosis, hemorrhage and other gross lesions)	7	2	9	52	81	133
Epilepsy		1	1	43	37	80

Table No. 7—(Concluded)

CAUSE OF DEATH	YEAR ENDING SEP- TEMBER 30, 1899			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Mental diseases:						
Exhaustion of acute mental dis- ease	2	1	3	66	71	137
General paralysis of the insane...	9	....	9	84	19	103
The intoxications; heat-stroke; obe- sity:						
Heat-stroke.....	....	....	....	....	1	1
Debility of old age .....	....	....	....	26	43	69
Accident	2	....	2	7	3	10
Suicide.....	1	....	1	4	2	6
Surgical and gynecological diseases and diseases of the skin.....	....	1	1	5	4	9
Malignant new growths or cancer.....	....	6	6	10	25	35
Total	76	67	143	832	871	1,703

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during
the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1899			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Paternal branch	9	4	13	137	160	297
Maternal branch.....	11	10	21	189	226	415
Paternal and maternal branches .....	....	1	1	19	38	57
Collateral branches.....	23	23	46	220	227	447
No hereditary tendency..	66	69	135	751	603	1,354
Uncertain	19	21	40	820	902	1,722
Total	128	128	256	2,136	2,156	4,292

TABLE No. 9

Showing civil condition of patients admitted during the current year
and since October 1, 1888

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1899			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Single	54	55	109	1,083	827	1,910
Married	55	43	98	799	906	1,705
Widowed	17	29	46	199	381	580
Divorced	2	1	3	23	12	35
Unascertained .....	.....	.....	.....	32	30	62
Total	128	128	256	2,136	2,156	4,292

TABLE No. 10

Showing degree of education of patients admitted during the current
year and since October 1, 1888

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1899			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Collegiate	4	.....	4	32	11	43
Academic	7	13	20	130	123	253
Common school	86	87	173	1,278	1,218	2,496
Read and write	1	2	3	78	36	114
Read only	6	7	13	100	137	237
No education	10	8	18	153	146	299
Unascertained	14	11	25	365	485	850
Total	128	128	256	2,136	2,156	4,292

TABLE No. 11

Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1899						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month	3	4	7	9	3	12	48	44	92	67	43	110
One to three months	8	6	14	3	3	6	46	44	90	86	74	160
Three to six months	7	1	8	6	6	12	46	30	76	73	69	142
Six to nine months	5	5	10	6	1	7	51	31	82	40	52	92
Nine months to one year .....	.....	1	1	3	2	5	22	21	43	43	37	80
One year to eighteen months ..	9	1	10	7	3	10	51	38	89	69	62	131
Eighteen months to two years ..	2	1	3	6	2	8	20	22	42	47	49	96
Two to three years	4	3	7	3	6	9	87	69	156	63	58	121
Three to four years	6	8	14	7	11	18	51	65	116	70	63	133
Four to six years	10	4	14	7	5	12	64	74	138	58	57	115
Six to ten years	2	3	5	5	11	16	66	88	154	70	78	148
Ten to twenty years	5	8	13	9	9	18	78	104	182	110	157	267
Twenty years and over	6	12	18	5	5	10	41	58	99	36	72	108
Unascertained	9	10	19	.....	.....	.....	161	183	344	.....	.....	.....
Total	76	67	143	76	67	143	832	871	1,703	832	871	1,703
Average duration of insane life (giving years and tenths)				5.1	6.4	5.9	.....	.....	.....	4.8	5.8	5.3

TABLE No. 12

Showing ages of those admitted during the current year and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1899			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 15 years.....	1	.....	1	9	4	13
From 15 to 20 years.....	3	2	5	69	39	108
From 20 to 25 years.....	9	8	17	164	109	273
From 25 to 30 years.....	9	8	17	185	167	352
From 30 to 35 years.....	12	10	22	207	206	413
From 35 to 40 years.....	17	19	36	240	233	473
From 40 to 50 years.....	24	30	54	430	528	958
From 50 to 60 years.....	23	19	42	376	408	784
From 60 to 70 years.....	17	22	39	242	264	506
From 70 to 80 years.....	9	7	16	169	161	330
From 80 to 90 years.....	3	2	5	43	36	79
Over 90 years.....	1	1	2	2	1	3
Total	128	128	256	2,136	2,156	4,292

TABLE No. 13

Showing ages of those discharged recovered during the current year and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1899			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 20 years.....	2	2	4	19	16	35
From 20 to 30 years.....	4	12	16	77	75	152
From 30 to 40 years.....	6	7	13	58	76	134
From 40 to 50 years.....	10	3	13	59	52	111
From 50 to 60 years.....	4	2	6	44	28	72
From 60 to 70 years.....	4	.....	4	16	6	22
From 70 to 80 years.....	1	.....	1	3	3	6
Total	31	26	57	276	256	532

TABLE No. 14

Showing ages of patients who died during the current year and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1899			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 15 to 20 years.....				4	1	5
From 20 to 25 years.....	2		2	19	13	32
From 25 to 30 years.....	2	2	4	36	28	64
From 30 to 35 years.....	3	1	4	43	41	84
From 35 to 40 years.....	6	3	9	72	50	122
From 40 to 50 years.....	11	10	21	133	169	302
From 50 to 60 years.....	9	11	20	167	185	352
From 60 to 70 years.....	15	15	30	151	176	327
From 70 to 80 years.....	21	18	39	155	157	312
From 80 to 90 years.....	7	7	14	51	48	99
From 90 to 95 years.....				1	3	4
Total....	76	67	143	832	871	1,703

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients admitted during the year ending September 30, 1899

DURATION OF INSANITY	Men	Women	Total
Under one month.....	28	16	44
One to three months	23	16	39
Three to six months	14	9	23
Six to nine months	8	12	20
Nine months to one year		3	3
One year to eighteen months.....	7	6	13
Eighteen months to two years	3	3	6
Two to three years.....	11	5	16
Three to four years	7	5	12
Four to five years	3	2	5
Five to ten years	7	13	20
Ten to fifteen years.....	2	6	8
Fifteen to twenty years		5	5
Twenty to thirty years.....	3	11	14
Thirty years and upwards	1	6	7
Unascertained.....	11	10	21
Total	128	128	256

TABLE No. 16

Showing period of residence in asylum of patients remaining under treatment September 30, 1899

PERIOD OF RESIDENCE	Men	Women	Total
Under one month	22	17	39
One to three months		1	1
Three to six months	38	28	66
Six to nine months	17	46	63
Nine months to one year	10	10	20
One year to eighteen months	31	27	58
Eighteen months to two years	152	144	296
Two to three years	75	76	151
Three to four years	115	178	293
Four to five years	48	58	106
Five to ten years	276	232	508
Ten to fifteen years	109	94	203
Fifteen to twenty years	76	109	185
Twenty to thirty years	132	132	264
Total	1,101	1,152	2,253

TABLE No. 17

Showing the occupation of those admitted during the current year and since October 1, 1888

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1899			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Professional: Clergy, military and naval officers, physicians, law- yers, architects, artists, authors, civil engineers, surveyors, etc	7	1	8	58	6	64
Commercial: Bankers, merchants, ac- countants, clerks, sales- men, shopkeepers, shop- men, stenographers, typewriters, etc	12	.....	12	184	4	188

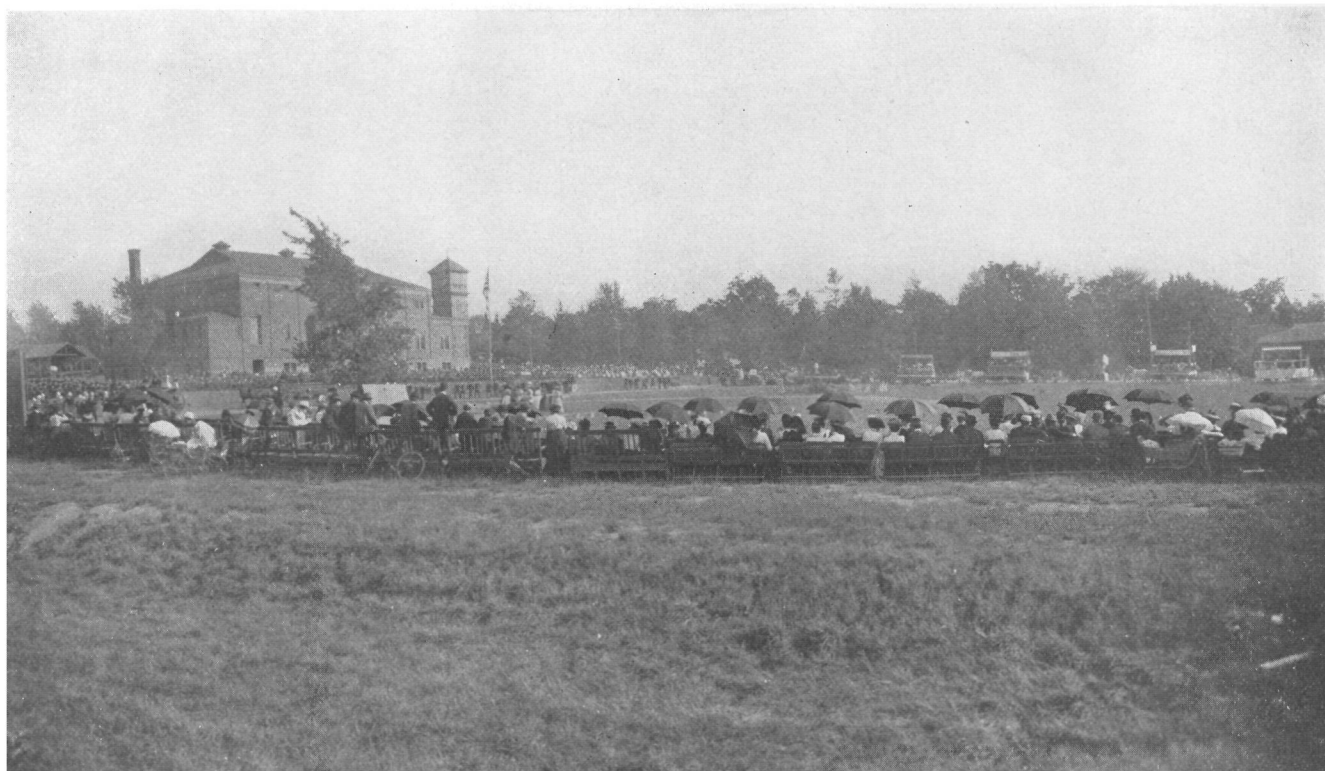


WYNKOOP HALLENBECK CRAWFORD CO.

WILLARD STATE HOSPITAL.—FALL PLOWING.



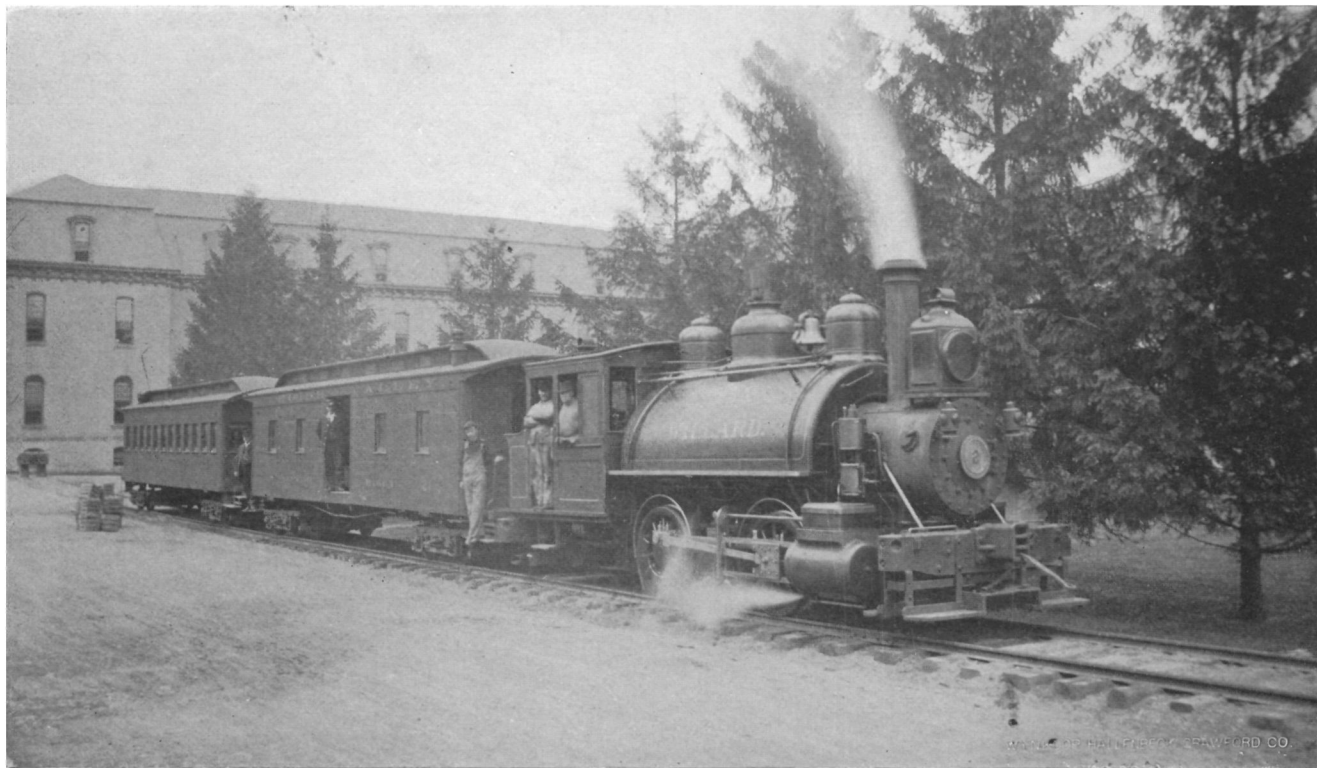
WILLARD STATE HOSPITAL.—HARVESTING.



WILLARD STATE HOSPITAL.—FIELD DAY.



WILLARD STATE HOSPITAL.—PARADE OF WORKING PATIENTS ON FIELD DAY.



WILLARD STATE HOSPITAL.—WILLARD BRANCH TRAIN STARTING FROM THE BUILDING.

Table No. 17—(Concluded)

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1899			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Agricultural and pas- toral: Farmers, gardeners, herds- men, etc.....	33	.....	33	589	2	591
Mechanics at out-door vocations: Blacksmiths, carpenters, engine-fitters, sawyers, painters, police, etc....	26	.....	26	355	.....	355
Mechanics, etc., at se- dentary vocations: Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc.....	9	.....	9	131	.....	131
Domestic service: Waiters, cooks, servants, etc .....	.....	24	24	24	1,127	1,151
Educational and high- er domestic duties: Governesses, teachers, stu- dents, housekeepers, nurses, etc.....	.....	88	88	42	719	761
Commercial: Shopkeepers, saleswomen, stenographers, typewrit- ers, etc.....	.....	1	1	.....	10	10
Employed in seden- tary occupations: Tailoresses, seamstresses, bookbinders, factory workers, etc.....	.....	8	8	11	102	113
Miners, seamen, etc.....	1	.....	1	26	.....	26
Prostitutes . . . . .	.....	.....	.....	.....	1	1
Laborers	33	.....	33	561	.....	561
No occupation	7	5	12	120	136	256
Unascertained .....	.....	1	1	35	49	84
Total	128	128	256	2,136	2,156	4,292

TABLE No. 18

Showing the nativity of patients admitted during the current year and
since October 1, 1888

NATIVITY	YEAR ENDING SEPTEMBER 30, 1899			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
California	1	.....	1	1	.....	1
Connecticut.....	1	1	2	14	8	22
Florida.....	.....	1	1	.....	2	2
Georgia.....	.....	.....	.....	.....	1	1
Illinois.....	.....	.....	.....	5	2	7
Indiana.....	.....	.....	.....	1	4	5
Iowa.....	.....	.....	.....	1	.....	1
Kansas.....	.....	.....	.....	.....	2	2
Kentucky.....	.....	.....	.....	.....	3	3
Maine.....	.....	.....	.....	2	2	4
Maryland.....	.....	.....	.....	5	56	61
Massachusetts.....	.....	1	1	16	8	24
Michigan.....	2	1	3	10	5	15
Minnesota.....	.....	.....	.....	1	3	4
Mississippi.....	.....	.....	.....	1	.....	1
Missouri.....	.....	.....	.....	1	1	2
New Hampshire.....	.....	.....	.....	3	2	5
New Jersey.....	.....	.....	.....	9	7	16
New York.....	71	77	148	1,210	1,119	2,329
North Carolina.....	.....	.....	.....	2	2	4
Ohio.....	.....	.....	.....	4	1	5
Pennsylvania.....	1	2	3	53	36	89
Rhode Island.....	1	.....	1	2	.....	2
South Carolina.....	.....	.....	.....	1	1	2
Tennessee.....	.....	.....	.....	1	.....	1
Texas.....	.....	.....	.....	1	.....	1
Vermont.....	1	.....	1	9	6	15
Virginia.....	.....	.....	.....	1	4	5
Wisconsin.....	.....	.....	.....	2	5	7
Africa.....	.....	.....	.....	1	.....	1
Armenia.....	.....	.....	.....	1	.....	1
Austria.....	.....	.....	.....	5	3	8
Bavaria.....	.....	.....	.....	1	.....	1
Bohemia.....	.....	.....	.....	1	2	3
Canada.....	1	1	2	27	33	60
Denmark.....	.....	.....	.....	1	3	4
England.....	3	2	5	67	67	134
France.....	1	.....	1	15	5	20
Germany.....	5	8	13	163	174	337
Greece.....	.....	.....	.....	.....	1	1

Table No. 18—(Concluded)

NATIVITY	YEAR ENDING SEPTEMBER 30, 1899			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Holland				3	7	10
Hungary.....	1		1	4	3	7
Ireland.....	12	28	40	232	394	626
Italy.....	1		1	14	7	21
Malta.....				1		1
Norway.....				1		1
Nova Scotia.....	1		1	1		1
Poland				6	14	20
Russia				7	1	8
Scotland		1	1	10	13	23
Sicily				1		1
Sweden.....	2		2	8	7	15
Switzerland.....				10	1	11
Wales.....					1	1
United States.....	22	4	26	22	4	26
Unascertained.....	1	1	2	178	136	314
Total.....	128	128	256	2,136	2,156	4,292

Of the total number admitted since the 1st of October, 1890, the parents of 30 per cent. were both of foreign birth.

In 2 per cent. the parentage on the paternal side was foreign, while that on the maternal side was native.

In 4 per cent. the parentage on the maternal side was foreign, while that on the paternal side was native.

The records in this hospital prior to 1890 do not show the statistics required.

TABLE No. 19 .

Showing the residence by counties and classification of patients admitted during the year ending September 30, 1899

COUNTIES.	Public	Private	Total
Albany			
Allegany	13		13
Broome			
Cattaraugus			
Cayuga	42		42
Chautauqua			
Chemung			
Chenango			
Clinton			
Columbia			
Cortland			
Delaware			
Dutchess			
Erie	1		1
Essex			
Franklin			
Fulton			
Genesee	11		11
Greene			
Hamilton			
Herkimer			
Jefferson			
Kings			
Lewis			
Livingston	1		1
Madison			
Monroe	29		29
Montgomery			
New York	1		1
Niagara			
Oneida			
Onondaga	1		1
Ontario	33		33
Orange			
Orleans	11		11
Oswego			
Otsego			
Putnam			
Queens			
Rensselaer			
Richmond			
Rockland			
Saratoga			

Table No. 19—(Concluded)

COUNTIES	Public	Private	Total
St. Lawrence			
Schenectady			
Schoharie			
Schuyler	8		8
Seneca	11		11
Steuben	37		37
Suffolk			
Sullivan			
Tioga			
Tompkins	19		19
Ulster			
Warren			
Washington			
Wayne	22		22
Westchester			
Wyoming			
Yates	6		6
Soldiers' Home	10		10
Total	256		256

TABLE No. 20

Showing the residence by counties and classification of patients remaining under treatment September 30, 1899

COUNTIES	PUBLIC		
	Men	Women	Total
Albany	65	103	168
Allegany	34	35	69
Broome			
Cattaraugus	2	1	3
Cayuga	105	81	186
Chautauqua	2	3	5
Chemung	39	34	72
Chenango			
Clinton		2	2
Columbia	1	10	11
Cortland			
Delaware			
Dutchess		1	1
Erie	35	7	42
Essex	4	4	8
Franklin	10	6	16
Fulton	12	9	21
Genesee	29	19	48
Greene	3	1	4
Hamilton	1		1
Herkimer	6	7	13
Jefferson	1		1
Kings		2	2
Lewis	5	1	6
Livingston	19	22	41
Madison	3	2	5
Monroe	19	50	69
Montgomery	11	10	21
New York	121	114	235
Niagara	9	5	14
Oneida	1	1	2
Onondaga	27	31	58
Ontario	91	85	176
Orange	8	2	10
Orleans	22	13	35
Oswego	2	6	8
Otsego			
Putnam	1	3	4
Queens	15	20	35
Rensselaer	14	65	79
Richmond		7	7
Rockland	1		1
St. Lawrence			
Saratoga	11	13	24

Table No. 20—(Concluded)

COUNTIES	PUBLIC		
	Men	Women	Total
Schenectady	9	13	22
Schoharie.....	.....	.....	..
Schuyler	32	27	59
Seneca	49	49	98
Steuben	95	80	175
Suffolk	6	3	9
Sullivan	1	.....	1
Tioga .....	.....	.....	.....
Tompkins	43	48	91
Ulster.....	1	19	20
Warren	1	4	5
Washington.....	.....	12	12
Wayne	52	39	91
Westchester	14	50	64
Wyoming.....	2	.....	2
Yates	23	31	54
Soldiers' Home.....	26	.....	26
Unascertained.....	.....	.....	.....
State patients.....	18	2	20
Total	1,101	1,152	2,253

THIRTY-SECOND ANNUAL REPORT

OF THE

BOARD OF MANAGERS

OF THE

WILLARD STATE HOSPITAL

TO THE

STATE COMMISSION IN LUNACY

FOR THE YEAR 1900

TRANSMITTED TO THE STATE COMMISSION IN LUNACY

ALBANY

JAMES B. LYON, STATE PRINTER

1901

THIRTY-SECOND ANNUAL REPORT
OF THE
BOARD OF MANAGERS
OF THE
WILLARD STATE HOSPITAL
TO THE
State Commission in Lunacy
FOR THE YEAR 1900.

OFFICERS OF THE HOSPITAL

MANAGERS

HON. S. H. HAMMOND.....	Geneva
WILLIAM J. POLLARD.....	Seneca Falls
JOHN H. OSBORNE.....	Auburn
ABRAM S. STOTHOFF.....	Watkins
MARTIN L. ALLEN.....	Seneca Falls
PROF. J. L. MORRIS.....	Ithaca
MRS. C. S. MONGIN.....	Waterloo

OFFICERS OF THE BOARD OF MANAGERS

PRESIDENT

HON. S. H. HAMMOND, Geneva

SECRETARY

WILLIAM J. POLLARD, Seneca Falls

TREASURER

HENRY PETERSON, Lodi

ATTORNEY FOR WILLARD STATE HOSPITAL

HON. S. S. PARTRIDGE, Phelps

RESIDENT OFFICERS**MEDICAL SUPERINTENDENT**

WM. AUSTIN MACY, M. D.

FIRST ASSISTANT PHYSICIAN

WM. L. RUSSELL, M. D.

SECOND ASSISTANT PHYSICIAN

THOMAS J. CURRIE, M. D.

ASSISTANT PHYSICIANS

ROBERT E. DORAN, M. D. WILLIAM STEINACH, M. D.

CHARLES F. SANBORN, M. D. JOHN W. RUSSELL, M. D.

JUNIOR PHYSICIAN

DONALD L. ROSS, M. D.

WOMAN PHYSICIAN

J. ERNESTINE HILLS, M. D.

MEDICAL INTERNE

LOUIS T. WALDO, M. D.

• STEWARD

MORRIS J. GILBERT

MATRON

S. LOUISE LAIRD

REPORT OF BOARD OF MANAGERS*To the State Commission in Lunacy:*

The managers of the Willard State Hospital have the honor to submit the thirty-second annual report of this institution, for the year ending September 30, 1900, together with the reports of the Superintendent and the Treasurer for the same period of time.

Respectfully submitted,

S. H. HAMMOND,

President of the Board of Managers

REPORT OF THE MEDICAL SUPERINTENDENT

Hon. S. H. HAMMOND, *President of the Board of Managers, etc.,
Geneva, N. Y.:*

Dear Sir.—I respectfully forward to you herewith, for presentation to the managers of the Willard State Hospital, the annual report of the said institution for the year ending September 30, 1900. The usual statistical tables, together with the other customary reports of the treasurer and steward, are also appended.

The following table shows the movement of population during the past year:

	Men	Women	Total
Remaining October 1, 1899.....	* 1,101	1,152	2,253
Admitted during the year.....	145	124	269
Total number treated during the year.	1,246	1,276	2,522
Average daily population.....	1,115	1,155	2,270
Discharged during the year.....	124	132	256

The patients discharged were divided as follows:

	Men	Women	Total
Discharged as recovered.....	23	27	50
Discharged improved	25	24	49
Discharged unimproved	7	7	14
Discharged not insane.....	5	0	5
Died	64	74	138
Remaining October 1, 1900.....	1,122	1,144	2,266

During the year there was an increase of 21 men, a decrease of 8 women, making a total increase of 13. The largest number under treatment on any one day, was 2,295, on August 4th, and the smallest number was 2,252 on October 2d. Of the patients admitted during the year, 188 were brought direct from their homes; 18 were admitted from almshouses; 6 from hotels; 31 from jails; 6 from city hospitals; 11 were transferred from other

* A patient who eloped, but who could not be discharged because committed under a criminal order, is included in these figures.

New York State hospitals, and 9 were received from the Soldiers' Home. All of those admitted were public patients. There were 2 patients admitted who were under 15 years of age; 10 per cent. of the whole number were over 70, and of these, 5 were over 80. The largest number admitted were between the years of 50 and 60. The percentage of recoveries, calculated upon the daily average population, was 2.2 per cent. If calculated upon the number of admissions it would be 18.7 per cent. Of the 118 patients discharged, 9 were transferred to other State hospitals in the State; 45 were discharged at the expiration of parole; 56 went direct to their homes and 7 eloped. One of the number who eloped was located after he was discharged and sent to one of the other State hospitals. Five others were found after their discharge to be with their friends, and were getting along sufficiently well to allow their remaining at home. This will show that of the 7 people who eloped, all were satisfactorily accounted for, and their cases closed, except one, who has not been heard of.

The death rate for the year was 6 per cent.

AMUSEMENTS

Such amusements as have been provided for the patients during the past year were much the same as in the immediate preceding year. The Commission has continued to allow us a special fund for the amusement of patients, and this has been expended by having entertainments at the hospital from time to time; by the purchase of one or two new pianos; the purchase of games at different times, music boxes, or such other articles as would conduce to the greatest amount of amusement for the patients.

On September 19th, Field Day was observed as usual, and was considered one of the best affairs of the kind known in the history of the hospital. Some two or three thousand or more people were upon the grounds, and many outsiders from some little distance from the hospital were among those viewing the exercises.

OCCUPATION

Such occupations as have been provided for the patients at the hospital during the past year have been very much the same as usual, though in some directions, such industries as have hitherto been started, have been carried out to a greater extent than formerly.

The work on the farm and in the gardens has been very materially interfered with because of the excessive drought, and much less new work in the way of improvements, such as grading, ditching, and many other things of this kind, has been undertaken than usual, partly for the reason that the reduction in the number of employees last year has drawn from our attendants and nurses' force to almost an equivalent degree, for the relief that has had to be provided to meet cases of absence on account of vacations, pass-days and sickness, in different departments that were affected, though in some of the mechanical departments, such as the carpenter and painter's divisions, we have not allowed this to interfere appreciably, but have either had work that was required done by special help allowed by the Commission, or have allowed minor matters to go, because of our not feeling able to meet them. There are quantities, in fact I might almost say, hundreds of small matters during the course of the year, that come up, on the reports, that have to wait, because little alterations to locks, doors, windows, walls, porches and all sorts of things of this kind, have to be attended to, and yet, if we have to put them in an estimate for matters of this kind, they would seem remarkably trivial when asking for additional help by the month. A great many things of this sort accumulate in an institution as large as ours, and particularly when so old, and what I outlined as probable last year, in the matter of accumulation of things of this kind, has already begun, and we find it requires the most constant and painstaking care to prevent this. Of course, as far as we are able and can foresee it, we try to prevent the accumulation of minor repairs and the running down of the hospital, but we find that our former experience still holds, namely, that it is very desirable to have

enough permanent men to attend to all of these things, such an arrangement being calculated to do much more towards keeping the hospital in good repair than that which prevails at present, when all repairs or betterments in excess of the capacity of our working force have to be foreseen and separately provided for.

This also affects the employee largely, in not reporting many matters that it is known may have to be waited for indefinitely. I trust that one of these days we will be able to have this matter placed upon a somewhat different footing, and one that will do somewhat more justice to the institution.

I will not burden this report by detailing at length under this caption, the various kinds of employment which our patients have been engaged in, as these are well known to all of the managers, and it is sufficient to say that where possible, our industries have been extended rather than contracted. As to certain matters of new work, I would state that we finished building the breakwater on the lake front and filled in and graded the grounds back of it. We have now almost completed the grading and road building around the exercise field, east of the electric light plant, and a large number of trees were planted on these grounds. We also planted a large number of ornamental trees and shrubs which were allowed us by the Commission, along the main roadside, through the grounds and about the buildings. Such excavation as was necessary at the new building now known as "Hillside," and formerly known as the "Meddick House," was done and a good cesspool was built and water and sewer pipe put in. A water pipe was also run connecting this building with the main water system, giving fire protection as well.

The water system that had been previously started, for giving us fire protection at the different buildings was completed during this season, and hydrants were conveniently located where necessary. Water was also carried into some of the meadows east of the main road near "Hillside," and a cement watering trough was placed there for the stock. Considerable grading was done around the piggeries, and the grounds were otherwise

improved. At detached building No. 1, the old driveway was filled in with new shale, and a sidewalk was made to each cottage, and considerable grading was done. Some of the gutters were also repaved to carry off the roof water. With the aid of patients' labor a cement walk 1,500 to 1,800 feet in length, was built from the main administration building to the railroad depot. The cost of material, considering that we were able, with our sand barge, to get all the sand needed from the hospital sand bank, was only $4\frac{3}{4}$ cents per square foot, and as the paid labor was limited to only one special attendant and an attendant detailed to look after the patients, the total cost of this sidewalk was extremely reasonable.

An excavation was made for a new locomotive house, south of the laundry building, and water and sewer pipes were put in, and such work as was necessary to be done, in connection with the paid labor for building this, was performed by the patients.

The grading about the laundry was well started, and in time we hope to have a bleaching ground back of this building, and to very much improve the surroundings at this point on the hospital grounds.

Quite a quantity of rock and shale were placed upon our roads and walks, they being afterwards rolled with a steam roller, and this work we now hope to continue until finished. A dock was built at the sand bank, partly by patients' labor, and a large amount of sand was loaded on the barge and brought to this hospital, as well as a matter of 180 yards or more of gravel. About 10,000 tons of coal were unloaded during the year. We harvested and packed all of the ice used in this institution, gathering during the past winter about 1,800 tons.

During the past year we have introduced into the tailor shop the making of winter caps, mittens, suspenders and fine shirts for men, and ulsters for the women patients. We are employing about one hundred patients regularly in the laundry, and with the new machinery given us by the Commission this last year, we hope in the future to get along better in this division, even than during the past year. We have had much less complaint

in our laundry during the past year or two, since the system was inaugurated of checking everything in and out and keeping closer track of the clothing on the wards, except that we have found that our equipment has been hardly great enough to do the work involved, which amounts to about 50,000 pieces per week, or 200,000 pieces per month.

Notwithstanding the conditions which I referred to, from increasing the amount of relief that had to be provided from our ward service, I am glad to state that we have by constant effort, been able to increase the percentage of people employed at some useful occupation. This percentage for the average daily employment for the year, being 51.69 as against 50.49 for the preceding year.

WORK OF THE MEDICAL STAFF

At the first of the year the staff was reduced by two. This obliged us to make a very complete change in the medical organization of the hospital, as laid out prior to this time, and effected a reduction in the number of men working on the acute services. For this reason several methods for the closer study and observation of cases which were being introduced, had either to be modified or abandoned. The reduction of the staff, taken in connection with the large amount of additional work that was thrown upon us during the last year, by reason of the epidemic of diphtheria which we have had to deal with, has, we regret to say, prevented us from making such progress as we would have liked towards the closer study and better individual care of special cases, which we had previously anticipated could have been brought about as time went on. With the present staff, when all are on duty, there are only just about enough men for the ordinary routine work, when done in the way that we would wish, the proportion of physicians to patients being less than 1 to 200, when both the superintendent and woman physician are included in making up the percentage and the special detail, because of having to send physicians to inspect and see patients at a distance; absences because of vacations and sickness; disin-

fecting and other work of this kind, effect such conditions, that practically it might be considered as equivalent through detailed duty, to having one physician off duty during almost every day of the year. As a matter of fact, during the last year the absences have amounted to over 332 days of twenty-four hours or double the number for twelve hours for one physician, and this, of course, reduces the effective working force, even when the superintendent and woman physician are included in making out the percentage, to very much less than 1 to 200, the standard that it has hitherto been thought necessary to maintain.

Manifestly in an institution as large as this, the superintendent can scarcely be counted in, in making a proportion of this kind, because of any detailed medical work that he is likely to accomplish in giving *individual* care to patients. While the superintendent does have time for a large amount of medical work of every description, still, with 2,200 or 2,300 patients, it can not be expected that he is going to participate very much in the individual care of a great many patients, as there is always an enormous amount of every kind of medical and other work that must pass under his supervision to take his time and attention from such duties.

Even the woman physician must necessarily spend much time in looking after women employees and special cases of women patients, so that the medical service to which she might be assigned, consisting of a definite number of wards, must be comparatively small as compared with that of the men physicians. I merely state these observations, and leave it for time to show which view is the most correct on this subject, well knowing that the views of different individuals vary considerably, but feeling that it is much better to work towards giving the greatest amount of individual care, particularly in acute cases, for the reason that this promises to increase the recovery rate in these cases, while with the chronic cases it tends to make their lives much more endurable, and to very much increase the number who will acquire useful habits, thereby assisting through the work that they accomplish, to maintain themselves and their

fellows at a lower per capita rate, and to give them, particularly where large farms and gardens are utilized, a much more liberal diet than would be the case if the same had to be paid for.

Rather less work of a surgical character has been done during the past year, than in the preceding one. This has been particularly because of the prevalence of diphtheria at the hospital. However, twenty-five operations were performed besides minor surgical work, such as the care of wounds, some few fractures, etc. The operations performed included trephining, fixation of kidney, repair of vesico-vaginal fistula, herniotomy, laparotomy, relief of urethral stricture, opening of mastoid process, amputation, etc. This work is much handicapped by lack of facilities and a good operating room, and a special hospital for caring for the sick, separated from all the wards, so as not to have infection of any sort introduced into it, would be very much appreciated.

We are also at somewhat of a disadvantage because of the amount of surgery done not being large, and the inability on this account to have nurses who have received the amount of training in surgical work that we would like to have available in handling operations that we wish to undertake. However, the results from our work have been excellent, and in this we have been fairly well satisfied.

Dr. Wm. B. Jones, of Rochester, N. Y., has gratuitously given his services as surgeon to the hospital when required, virtually acting as consulting surgeon for us. Dr. Jones has been called in cases of a particularly serious nature, when we have felt the need of dividing the responsibility with some one who is doing more surgery than we ordinarily do at the hospital, and he has always very willingly and cheerfully assisted us at all times, and his cooperation has been extremely helpful to the hospital.

I would respectfully recommend to your board that Dr. Jones be made regular consulting surgeon to the hospital. Positions of this kind connected with institutions as large as this, are usually honorary, and Dr. Jones has signified his entire willingness to accept such a position with us, without compensation, providing he is reimbursed to the extent of his actual carfare

and expenses in coming to the hospital from Rochester, and if an arrangement of this sort can be arrived at with the Commission in Lunacy, I think it is only fitting that it should be carried out in recognition of the help already tendered us by Dr. Jones.

No particular disease was especially prevalent during the past year, except diphtheria, and from this we lost no patients. The death rate of the hospital was 5.47% on the whole number treated. There were 165 cases admitted to the sick wards, besides those cared for at the infirmaries for the aged and feeble, and such occasional cases of slight ailments as occurred on the various wards, not severe enough to necessitate removal to the hospital.

TYPHOID

We are very much pleased to state that only two cases of typhoid fever occurred during the year, but on the other hand, at certain seasons of the year an exceptionally large amount of diarrhoeal trouble prevailed at the hospital.

TUBERCULOSIS

The percentage of deaths from this cause is 14.7%. This was less than last year (16%), and the lowest in the history of the hospital since the first three years, although it may be assumed that the diagnosis is now more carefully made than formerly. It would seem, therefore, that the segregation and more systematic and thorough treatment were having some effect. Isolation is still, however, very imperfectly accomplished, owing to the location of the isolation wards and their limited capacity. In the case of the ward for women, the exposure is toward the north, and it does not receive sufficient sunshine.

The facilities for getting the patient out of doors are also insufficient. It would be very desirable if, following the reduction in the death rate thus far obtained, and the improvement in a great many cases which has resulted because of segregating and giving special care to tuberculosis cases, we could add to our equipment a special building, with sun rooms and other

facilities for combatting disease. There are at present in the hospital 42 patients, in whom the diagnosis of pulmonary tuberculosis has been made, 26 being women and 16 men.

DIPHTHERIA

Twenty-five cases of this disease have occurred during the year, nine of whom were men and sixteen women; nineteen of the number were employees, among whom the disease has prevailed more extensively than among the patients, whenever it has appeared at the hospital. The disease was distributed as follows: Two in the main building; two at D. B. 1; two at D. B. 3; four at D. B. 4; four at the infirmary; ten at the branch, and one at "Hillside." The number of cases mentioned in this paragraph include only cases of membranous diphtheria, and no mention is made of the large number of germ cases, from many of which we found infection spread.

Counting from early in the summer of 1899 through to the end of this fiscal year, but, of course taking a few more months, the number of cases of diphtheria that we have had to contend with was between seventy and eighty, and, aside from the large number of people showing germ infection that we have had to isolate and quarantine, during the recurrent outbreaks during the development of the twenty-five cases referred to, the principal difficulty that we have had here in the year mentioned, has come through the strain of meeting these conditions, and the fright occasioned by it among the employees and consequent changes in the service, etc.

Still, I desire to record in connection with what I said about the diphtheria, that the majority of the employees have all met this matter in a very self-sacrificing spirit, and that they have very earnestly cooperated with us in carrying out the methods taken to stamp out the infection. Considerable has been written about the outbreak of diphtheria at this hospital, and we have noticed similar accounts of epidemics of this sort in other institutions and places, but it would burden the report considerably to detail all that has been done at this place. It would

probably be sufficient to state that in addition to the very large number of cultures, aggregating over 21,225, which have been taken and examined during the year, and the immense amount of laboratory work which this has occasioned, we have immunized patients and employees at each outbreak very extensively, hundreds of people having been treated in this way, with few, if any cases of alarming reaction from the remedy. We have also disinfected as far as this seems possible, with formaldehyde, sulphur and disinfecting solutions of various kinds, and have made a series of laboratory tests to see whether the disinfection of clothing, bedding and all sorts of articles which required disinfection was thorough, etc. Narration of these details might properly belong to a medical article, but such steps are so constantly taken nowadays, that I hesitate to introduce an account of them into this report. No absolute way of eradicating infection of this kind seems thus far to have been found. When introduced into a very crowded institution, infection does not seem to be confined to the human being involved, but extends to the bedding, walls, wall paper, and many other things which apparently carry infection for a very long time, and surroundings thus infected may be dangerous for months, outbreaks occurring sometimes long after it had been supposed that places previously disinfected were free from germs. There is thus always a question whether this outbreak is from an old or a new infection. Some data, of course, have been collected by the bacteriologists concerning the life of the Klebs-Loeffler in the air, and under ordinary conditions, but time will probably tell whether all of the conclusions thus far drawn have been correct.

Massachusetts is drawing marked attention to the necessity of finding some way of absolutely stamping out diphtheria infection, and the attention of all bacteriologists interested in this has been directed to this matter for a long time. While we do not claim that we have discovered any positive way of guaranteeing the stamping out of diphtheria infection, we have found great aid both from immunizing and antitoxin and also from culture taking.

If we had to-day to depend on one or the other, I think there is no doubt that we would entirely prefer to fall back upon the immunization method, but at the same time, culture taking in our experience, has enabled us to determine, to some considerable extent, what individuals carry infection, and thus to keep some track of its spread through the hospital, and so valuable has this been that we feel it is almost entirely because of the culture taking methods that we have pursued, that, with the combined use of antitoxin as an immunizing agent, we have been able to keep informed of the infection and to virtually keep it under control, while it has seemed from time to time and week to week as if we were almost on the point of absolutely stamping it out. That we have not actually stamped out the infection at these times would seem to be due to the saturation of the surroundings with the germs, and it has been a great satisfaction for us to keep it as well in check as we have been able to, and also to be able to record that in spite of many cases of considerable severity, some of which were among the children of the officers or employees as well as among the adult population, we have been fortunate enough not to lose a single case by death in the past two years among over eighty cases of membranous diphtheria treated. It may be interesting in this connection to mention one of the limits that we place in the culture taking, to determine as far as possible the absence of infection from the throats, etc., of those previously showing bacilli.

Early in the investigation we found that some limit had to be fixed upon, so as to enable us to decide when to discharge people from quarantine, and, believing that all cases carrying the Klebs-Loeffler germ were undoubtedly dangerous and a menace to our community, we readily isolated and quarantined all those showing such germs, continuing to take culture until we succeeded in getting at least three successive negative cultures on alternate days from both nose and throat. A number of instances occurred where patients showed germs in the nasal secretions long after they disappeared from the throat, and one reason why we have tried to guard against these cases, was our conviction,



WILLARD STATE HOSPITAL.—BIRD'S-EYE VIEW OF HOSPITAL AND GROUNDS.



WYNKOOP HALLENBECK CRAWFORD CO.

WILLARD STATE HOSPITAL.—THE NORTH WING OF THE MAIN BUILDING.



WILLARD STATE HOSPITAL.—VIEW OF BRANCH FROM THE NORTHEAST.



WILLARD STATE HOSPITAL.—VIEW OF BRANCH FROM THE WEST.



WYNKOOP HALLENBECK CRAWFORD CO.

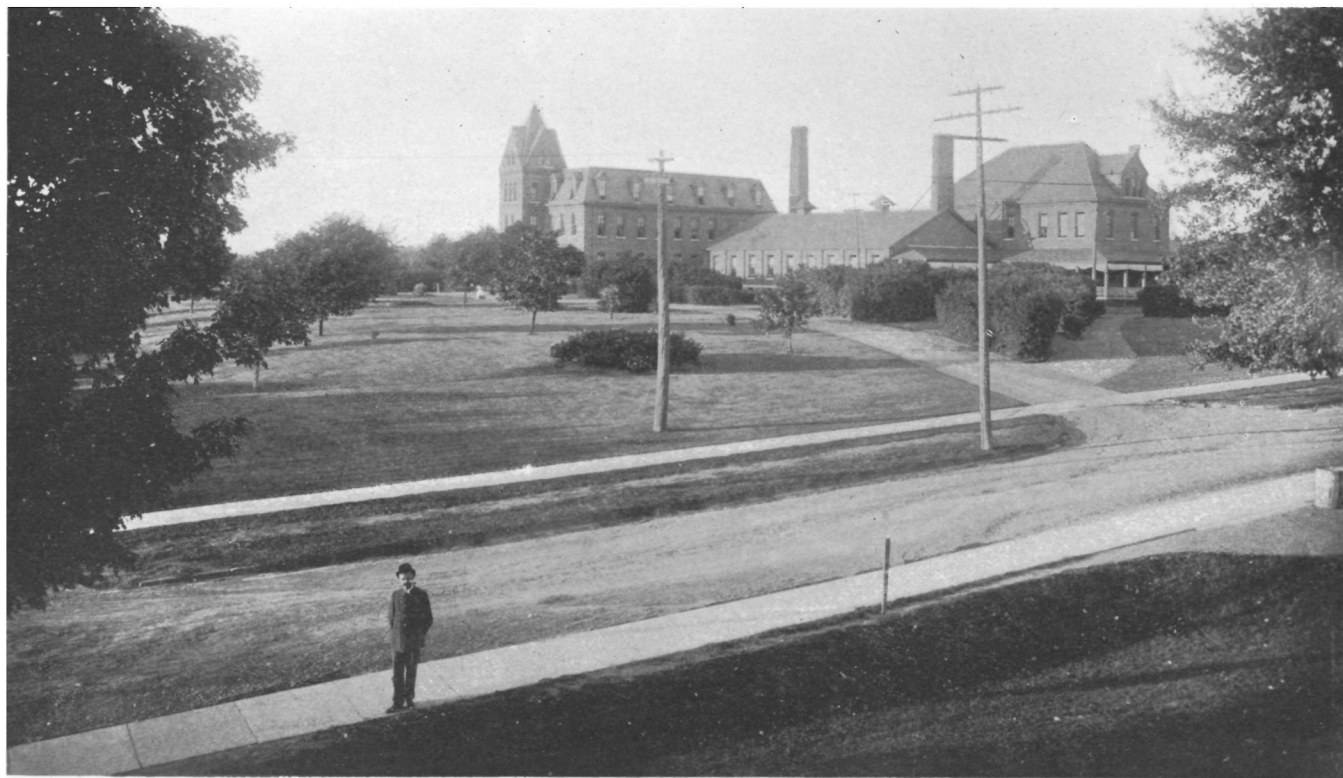
WILLARD STATE HOSPITAL.—VIEW IN FRONT OF ADMINISTRATION BUILDING.



WILLARD STATE HOSPITAL.—BIRD'S-EYE VIEW LOOKING EAST FROM TOP OF MAIN BUILDING,



WILLARD STATE HOSPITAL.—BIRD'S-EYE VIEW LOOKING SOUTH FROM THE MAIN BUILDING.



WILLARD STATE HOSPITAL.—INFIRMARY FOR MEN.



WILLARD STATE HOSPITAL.—MAIN BUILDING.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 1.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 1. PATIENTS MAKING A NEW ROAD.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 2.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 3.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 3.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 4.



WILLARD STATE HOSPITAL.—A BIT OF THE DRIVE AT DETACHED BUILDING NO. 4.

based on the work of others (and particularly because of our own experience in the outbreaks that we have suffered here in the past), that germs left in the human system upon the mucous membrane, etc., even though degenerated and incapable of reproduction, may regain their virility, and again become capable of spreading the disease. We have thus far found no case of germ infection reappearing in the same case, except from new infection, after the disappearance of the germs from both throat and nose was established by the method referred to. I do not mean to claim that this test is absolute and that there may not be exceptions to this, as I can conceive that germs might exist in very small colonies isolated upon inaccessible portions of the mucous membrane, which might develop activity after the six days mentioned in connection with this culture taking method. Still, as this is the best result that we have been able to arrive at within comparatively narrow limits, it is given for the benefit of those who may wish to try it.

THYROID TREATMENT

The use of thyroid extract as a remedial agent in the treatment of insanity, has been continued in a few cases. Four women, who were becoming chronic and were regarded as very unfavorable cases for mental improvement, were given thyroid in increasing doses until the usual reaction was obtained.

Two of the patients became much brighter, more active mentally and progressed favorably for two or three weeks, but after that time relapsed into the previous stuporous and indifferent state. The remaining two were not appreciably improved at any time.

PAINT

One of the matters that has been most firmly impressed upon us by reason of our having to contend with diphtheria at the hospitals for so long, is the necessity of abandoning the use of cheap preparations for the walls, and relying for wall coverings entirely upon paint. In fact, it would seem as if it was almost as necessary to have the same smooth surface as is obtained by

the so-called porcelain paints that is always insisted upon for general hospitals. Our different investigations into the methods of disinfection show that wall paper and wall coverings of any kind which are partly porous are absolutely dangerous, and cases of infection have started up immediately after the use of rooms the walls and ceilings of which were covered with material of this nature, upon the first use of these rooms, after having, as we thought, been freed from infection, and although we had resorted to every known method of disinfection. Further confirmation of this lies also in the experience that we have had here in relation to the subsidence of erysipelas in wards where we had previously used kalsomine, or other wall dressings. Here we have found a history, upon careful investigation among older employees, of cases of erysipelas appearing with quite a great deal of regularity over considerable extent of time. Probably when the matter was first looked into there had been an interval during which some protection had been afforded by something which had been placed upon the walls, but, upon having them carefully scraped and painted, all the seams being thoroughly filled, the base-boards removed, the walls plastered behind these boards to the floor, the floor itself being carefully dressed, etc., there has seldom been any reappearance in the rooms treated in this way; though, up to the time that we finally abandoned all dressings except paint, we had quite a number of cases recur in these rooms, without there being apparently any ascribable cause. My own experience has always been in favor of paint and of surfaces that were just as smooth as they could well be made on side walls and ceilings, but in the tendency to economize in order that institutions like ours can be maintained at the very lowest per capita, there is always a tendency for the different superintendents to become pitted against each other, in seeing how far they can go in different directions to reduce expenses. Some of the older institutions in this country show a very plain record of results of such tendencies in their annual reports.

MEDICAL MEETINGS

During the past year the same custom was pursued of having the medical staff met daily by either the first assistant physician or the medical superintendent, and bringing up the discussion of such medical or other matters as affected the welfare of the patients directly or indirectly, the discussion of special cases, and many other matters that would be of constant interest to us in the care of our cases, and we have also continued to maintain our medical society, meeting as a rule once a month, and having a certain number of especially prepared papers read and discussed.

This past year our meetings were somewhat interfered with by various matters, still, several regular meetings were held at which 20 papers were read and discussed and a number of cases presented. The medical meetings, though not at all largely attended by outsiders, were of great value, and many of the papers prepared were well up to the average of such papers, as are usually read at the meetings of other medical societies.

The Journal Club of the hospital staff has continued to meet each two weeks, as in the past, and different members have at these occasions been assigned regular work in the culling over of the current medical journals, and the review of such special subjects, as they take, or are assigned to them so as to keep the different members in this way in close touch with what is being done in the various lines of interest to them.

AUTOPSIES

There were 28 autopsies made, and in many of these interesting and valuable observations were made, but we would have liked to have made more systematic and closer study and collection of data in some of these cases than has been entirely possible with the great amount of work that our medical staff has had in hand during the past year.

LABORATORY

The usual clinical work has been carried on, though in rather an incomplete way, because of the large amount of cultures and other work made necessary by the presence of diphtheria in the hospital, which has largely absorbed the energies of the laboratory assistants. Two, and for a time, three extra assistants were employed in this laboratory work by permission of the Lunacy Commission, two of them being physicians, and the others medical students.

MEDICAL LIBRARY

Seventy-seven volumes were added during the year, and the number of journals subscribed for was increased by three.

TRAINING SCHOOL FOR NURSES

During the past year 25 applicants were admitted to the school, and 8 were graduated. The school for nurses at this hospital has been handicapped considerably because of the amount of detailed work that it has been necessary to throw upon our ward attendants, and the constant changing in service that this has occasioned. Then, too, owing to commercial relations in the general community and other matters of this sort, there have been a large number of changes in the employees during the past year, there having been 179 resignations and dismissals.

The number of changes has even caused difficulty to us in filling the higher positions among the employees with those who have had sufficiently good and thorough training. While I believe that outside conditions have contributed quite a little to these results, still it is certain that the isolated condition of this institution and the lack of facilities for recreation and change, in the surroundings of the hospital, because of the lack of pleasant and healthful quarters for the nurses, or opportunities for diversion and amusement, except by going to some considerable distance from the hospital by cars, have had a great

deal to do in producing this result. Some of the best nurses that we have had have very frankly told us when leaving that they had nothing whatever to complain of as far as the hospital was concerned, and were grateful for the opportunity which they had for studying and training themselves in nursing, etc., but the one plea we invariably do have, is that it was too lonely here for them to remain in such quiet surroundings. We must necessarily cope with this because of the peculiar location of the institution, but, it is to be hoped that, as time goes on, attractive attendants' homes with recreation rooms and sufficiently ample quarters, fitted up well enough to be pleasant and attractive will do much to offset this feeling. The nurse's life, as everyone knows, is one round of tiring routine and the monotony of such existence is all the more marked when it is among the insane. We have done the most that was possible with the facilities at hand, to make the surroundings of the nurses as attractive as possible, and have done whatever seemed practicable in encouraging a proper interest in their work.

A special library of books pertaining to nursing and allied subjects has been established during the past year, and now contains thirty-three volumes and has been very extensively used.

IMPROVEMENTS

In reporting on the matters that come under this caption, I wish to take advantage of the opportunity to state that during the past year, as in the year preceding, we have had to feel that as far as the resources of the Lunacy Commission are concerned, they have willingly cooperated, and the remarks that we have made concerning the necessary improvements which should be taken up, have not been intended to be taken as coming from the superintendent in any hypercritical spirit, but merely as a matter of record to draw attention to matters that much need attention at this hospital.

In an old institution like the Willard State Hospital, there is much that was built up on a standard that was ideal many years ago, but that does not now conform to modern ideas. Then, too,

there are things which progressive institutions try to secure from year to year to increase their facilities or equipment that must be mentioned in lists of needs though it is not always expected that they can be obtained at once. All hospitals, as a rule, furnish data of this kind, and then try to follow them up as years go on, in order that the resulting institution, after the lapse of considerable time, may have such betterments and additional facilities as have from time to time been asked for, and the necessity of which has been made apparent. In this hospital the most trying necessities are a better supply of drinking water, better plumbing and improved sanitary conditions in general. After these are finally provided for, we come to minor improvements that it would be desirable to secure, and as large appropriations are often harder to obtain than smaller ones, an institution frequently succeeds in gradually getting small allotments, when it is very difficult to get large ones.

I would state in regard to the change in the water supply, that it has been our hope that we would be able to find water in this section which we could utilize in place of the lake water, and at one of the meetings of the board of managers a committee consisting of Managers Morris, Osborne and the superintendent were appointed to begin a study of the resources of the surrounding country, to see what could be done in this line. This work has been pursued uninterruptedly up to the present, and the work done by the committee was very materially enhanced by the assistance of the State geologist, Prof. Frederick J. H. Merrill, and one of the gentlemen connected with his department, Mr. E. C. Eckels, the State geologist very kindly allowing his assistant to come to the hospital on several different occasions and make a careful survey of the geology of the section, with particular regard to its water carrying capacity. Our relations with these gentlemen have been of the pleasantest kind, and we desire to acknowledge the very ready cooperation that we have met from them.

The work of the water committee has tended to show that for a temporary source of water, comparatively shallow wells driven

on the uplands would probably give us a supply during about nine months out of the twelve in the dryer seasons, but that in an exceedingly dry year or great drought, such as we have had this year, even these wells would be likely to fail because of the demand upon them, on account of the size of the institution, and that the only prospect of obtaining a supply other than by putting in a filtration system, would probably be met with by driving a deep well and going down through the different strata and testing each stream of water as it was met with, in order to see if a good supply of pure water might be obtained at considerable depth. To do this would be a very expensive experiment, but the necessities of the case entirely justify quite a considerable expense, with any possibility in view of getting good water. At the last meeting of the board of managers a resolution was passed requesting that the Lunacy Commission set aside for the digging of a test well, and the other work in connection with it, at least \$5,000, the details of the method of digging, etc., being left for further consideration. It is thought that the proper way to do would be to sink either a 12-inch well, so as to have ample space for testing different supplies of water met with, or a 6-inch and going down and pumping at each level, carrying the casing by bad water, and stopping at sweet water wherever it is met with, this size pipe being considered amply large enough for all the immediate needs of the institution.

It is not necessary to refer to the lists of desirable additions to, or changes in the facilities and equipment of this hospital, as they have appeared in our reports of late years. They speak for themselves, and some of these matters have gradually been attended to, while many others remain to be done. To place this institution on the basis of a thoroughly modern institution in every respect would probably cost a good many thousand dollars, and it is to be hoped that the effort in this direction that has been persevered in in the past will still be continued until this and all the institutions in this State stand among the best of their respective type in the land.

Early in the spring when the time came for us to take up the needs of the hospital, we had some small matters in hand which had been carried over from the preceding fall. The Lunacy Commission then called upon us for a list of such needs as it might be possible to attend to at that time, and at the time of their visit to the hospital, such a list was presented and gone over, and provisional allotments were made as far as they were willing to grant us funds. Under the arrangements in effect at that time, and those which were presented by reason of our having the provisional allotments referred to, the following named sums of money were expended for the purpose described opposite the expenditure, as follows:

Sand dock	\$268 54
Repairs to Meddick and VanVleet houses.....	159 96
Change in water supply.....	882 97
Rebuilding locomotive house.....	1,093 22
Screens for laboratory and shops	113 00
Repairs to employees' home.....	452 68
New gutters on store and rear east buildings.....	242 04
Additional laundry machinery.....	1,197 20
Steam carving tables.....	221 95
Addition to " Hillside " for boots, clothing and bath room	625 90
Cement walk, main building to railroad station....	536 20
Painting outside buildings.....	868 80
Food car, trainway to kitchen.....	60 00
Reshingling grain barn at " Hillside ".....	80 00
Spray bath at branch and infirmary.....	31 80
Farm fence	244 40
Steam heating plant at hotel.....	72 95
Switches to locomotive house and scales.....	32 90
Total.....	<u>\$7,179 51</u>

The list practically speaks for itself, but I draw attention to just a few matters. The sand dock has already been of a very

great value to us, and four or five hundred cubic yards of sand, and quite a large supply of gravel, have been brought across the lake during the season for use at the hospital. The repairs to the Meddick house, which is now known as "Hillside" enabled us, together with other appropriations which have since been made, to provide accommodations for twenty-five farm workers, outside of the regular buildings of the hospital. It had been hoped that we could have provided accommodations at the lake farm for between 30 or 40 patients additional, who could be utilized in the small fruit orchard and gardens that we have been establishing there, and had hoped to extend, but this work was brought to a standstill, and in all probability will not now be pushed for some time to come. We would not advocate these extensions as a matter of increasing the size of the hospital but rather in giving additional facilities in caring for the insane in a better and more profitable way, and reducing overcrowding in our main buildings.

Changes in the water supply as far as fire protection was concerned, were finally accomplished by putting in a very effective outside hydrant system, giving us 100 to 150 pounds pressure at the hydrants at most of our buildings.

The old locomotive house was taken down and a new one has been built with the sum of money specified. The house is of brick and is 75 feet long by about 40 feet wide, and the reason for the small expenditure is that we had a great deal of old material that we used in the construction of the building. The building is now placed where it is not unsightly, and the old site will gradually be cleaned up and improved.

The facilities for laundry work will be very materially improved by the addition of two machine washers and one new centrifugal wringer.

The cement walk from the administration building to the railroad station has been a very much needed improvement, and we have apparently obtained a very fine piece of work, and visitors can now come dry shod from the station directly to our office.

The painting of the outside buildings, other than the main building, was begun, but this work will still take some time to complete. We found, on going over these old buildings, that some twelve years had elapsed since anything had been done upon them in the way of painting, and much more labor and material was necessary on this account than would otherwise have been the case, and various repairs were also necessitated by reason of rotten wood, etc. This work is still in progress and excellent headway is being made, although it is very slow, particularly by reason of the large number of windows that have to be gone over and the constant changing of swing scaffolds, etc.

Repairs were made to the roofs of the buildings during the period specified, to the amount of about \$400. We also built two silos and intend trying the use of silage for the dairy of the hospital. A new floor was placed in the ironing room of the laundry.

In the spring the question came up as to what we should do with the hotel near the lake, and this matter was referred to the president of the Lunacy Commission, who advised that inasmuch as there was no guarantee of there being sufficient business to pay any regular hotel keeper to keep the hotel open at his own expense and pay rent, we should make whatever terms we could with the party to whom we should give the hotel, and either employ him to run it for the hospital in order that the friends of patients from such a wide district as this hospital has, should have proper accommodations when they came here to visit their relatives, or else that we should remit all rent and make some kind of an arrangement to have the hotel run by some hotel proprietor on his own account. The hospital was very unwilling to make any provision which would make it responsible for the actual arrangements, and therefore an offer was made to the party having the hotel during the previous year to take the hotel and run it, and he agreed to do this if all the rent was remitted or waived to him, and if the hospital should make some arrangements during the season to heat the hotel properly so that when winter came this could be done by burn-

ing coal at one point and thus allowing him to save help. These matters were all brought before the board of managers, and such arrangements meeting with their approval, they were also brought before the Commission in Lunacy who also approved of them, and since the time referred to we have been working under this agreement which has thus far been fairly satisfactory.

I wish to say that I am particularly pleased to report one small matter, but one worthy of some attention, and that is, that during the past year we were able to get the Lehigh Valley railroad to change the name of the station formerly known as "Willard" by naming it "Gilbert," after Captain Gilbert, who has been for so many years connected with the hospital. The name of the station at the hospital proper is also changed from "Asylum" to "Willard." This change obviates a very annoying complication that has previously come from the wrong ideas that people got who wanted to come to the hospital from a distance, because of the peculiar name of these stations. Generally outsiders expected that the station known as "Willard" was right at the hospital, and many of them would go there, not knowing it was over a mile away from the hospital, while the name "Asylum" clinging to the locality years after the name of the institution itself had been changed to hospital, was something that we had long wished to have changed.

The railroad has finally made the substitution in the name as described, and now those coming to Willard arrive at a little station that the railroad people built upon the grounds, only a short distance from the hospital, to which a cement walk leads directly.

NEEDS OF THE HOSPITAL

This fall the Commission notified the superintendent that when they visited the hospital they wished to have presented to them a list of such needs as the hospital would like to have considered by them during the coming year, and after careful consideration, and having referred the subject to one of the Board of Managers (almost all of these items have been before

the Board itself at one time or another, either upon the direct representation of the superintendent at the meetings of the Board, or in the annual reports), a list was drawn incorporating some of the items that had previously been presented in the annual report, and this list was divided under the two headings of "Needed" and "Desirable."

At the time of the visit of the said Commission these matters were all gone over with them carefully in detail, and the two members of the Commission who were present at the visitation agreed to incorporate such items as they were willing to endorse in the list of needs that would be presented to the Legislature this fall. It would seem to the superintendent that the bringing up of such matters in the fall, in anticipation of a session of the Legislature (instead of in the spring) was much more desirable than the method which has hitherto been followed, and, if these matters are brought in itemized form before the finance committee at the coming session, it is to be hoped that this hospital will receive substantial aid in getting some of the betterments that it has waited for a good many years to obtain. When these have been given us some of the other matters which have figured in previous lists, and which would be considered as desirable, can be brought forward.

As the minutes of the visitation of the Commissioners referred to immediately before will probably best give an idea of the matters that were brought to their attention and their view of the same, we will include the same hereafter in full. The remarks of the Commission which are placed opposite the items in the different lists will be printed immediately beneath each item as it occurs, and the full minutes of the visits of the Commissioners in the visiting book will be included as an appendix at the end of the report.

OVERCROWDING

There is very little to be said under this caption, other than what has appeared in previous reports. The conditions are virtually the same as they have been for the past two years,

and, relatively, I suppose must continue as now, until the general condition of the State, as far as overcrowding is concerned in the State hospitals, is improved sufficiently to allow of materially lessening the numbers that are cared for in our principal wards.

This overcrowding of the institution is probably more appreciated in the dining rooms and serving rooms than it is when one walks through the wards and sees them as they are usually made up and a few or none of the patients in bed. In four of our detached buildings we still continue to have to place tables in the day wards between the sleeping rooms and comparatively close to the water section, to avoid the most pernicious kind of overcrowding in the dining rooms, overcrowding that would mean the placing of the patients back to back, so that it would be utterly impossible for an attendant to pass between in order to serve the patients. This method of arrangement gives us quite tolerable results, but of course is not desirable when it can be overcome.

Proper pantries and serving rooms were not planned for when the buildings were originally constructed, and apparently little attention was given to this subject in the way that it is now arranged for in any modern institution.

One of the worst ways in which overcrowding makes itself felt in institutions for the insane is in rendering it very difficult to separate from close contact with the well, those patients suffering from diseases of contagious or infectious character. We have met with great difficulties in fighting diphtheria at this hospital, on this account particularly as it was necessary to free one or two wards from the patients who ordinarily resided there, doubling them up in other wards, and thus giving room for detention wards in order to care for those whom it was necessary to isolate from the others, as no ordinary building built for infectious cases would be likely to be elastic enough to meet all of the requirements of an institution of this size. We have been fortunate in having a small quarantine station where mem-

brane cases have been treated. This will accommodate on a pinch 12 or 15 beds.

Another extremely important matter in an institution of this kind to be considered in this connection is the presence of tuberculosis cases, and the facilities required for their proper care.

This subject has already been touched upon in connection with remarks concerning the work of the medical staff, etc.

For the sick and particularly for all such cases, proper facilities are always required, and with the tuberculosis patient, not only are ordinary comfortable surroundings necessary, but I think as much as anything, these surroundings should be such that they would have ample solarium space, which could be enclosed in summertime with screens to prevent flies and other insects from getting on them and possibly spreading the trouble. This matter has attracted our attention, particularly during the last very warm summer or two that we have had, and especially since much has been noted regarding the possibility of flies carrying disease germs.

MEDICAL STAFF

The following changes have occurred in the medical staff during the past year: Erving Holley, M. D., transferred from Manhattan State Hospital October 1st, to the position of junior assistant physician; William Steinach, M. D., resigned October 20th; Donald L. Ross, M. D., promoted to assistant physician October 21st; Albert G. Bising, M. D., appointed medical interne October 26th; Louis T. Waldo, M. D., appointed junior assistant physician at Hudson River State Hospital September 1st; Robert M. Andrews, M. D., appointed medical interne September 19th.

EMPLOYEES

The following changes have occurred among the employees during the past year: F. M. Hamlin, M. D., died March 19, 1900; W. J. McKee appointed Steward at Central Islip, left June 30th; J. X. Williams, transferred from Buffalo State Hospital to the position of bookkeeper.

ACKNOWLEDGMENTS

Religious services of visitation have been performed during the past year, and we desire to tender our thanks to Rev. H. A. Porter, Rev. C. W. McNish, Rev. Wesley Mason, Rev. Joseph W. Hendrick and Rev. J. A. Kennedy, all of Ovid.

During the latter portion of this year we were officially notified by the Assistant Secretary of the State Charities Aid Association of the appointment to this hospital as regular visitors for the said Association of Mrs. Clara E. Field of North Hector, N. Y., and the Rev. Robert Ellis Jones, President of Hobart College, Geneva, N. Y. Both Mrs. Field and Dr. Jones have already made several visits, and the relations sustained with them have been extremely pleasant.

Several of the surgical operations have been performed by Dr. William B. Jones of Rochester, N. Y., to whom the hospital is indebted for skillful service freely rendered.

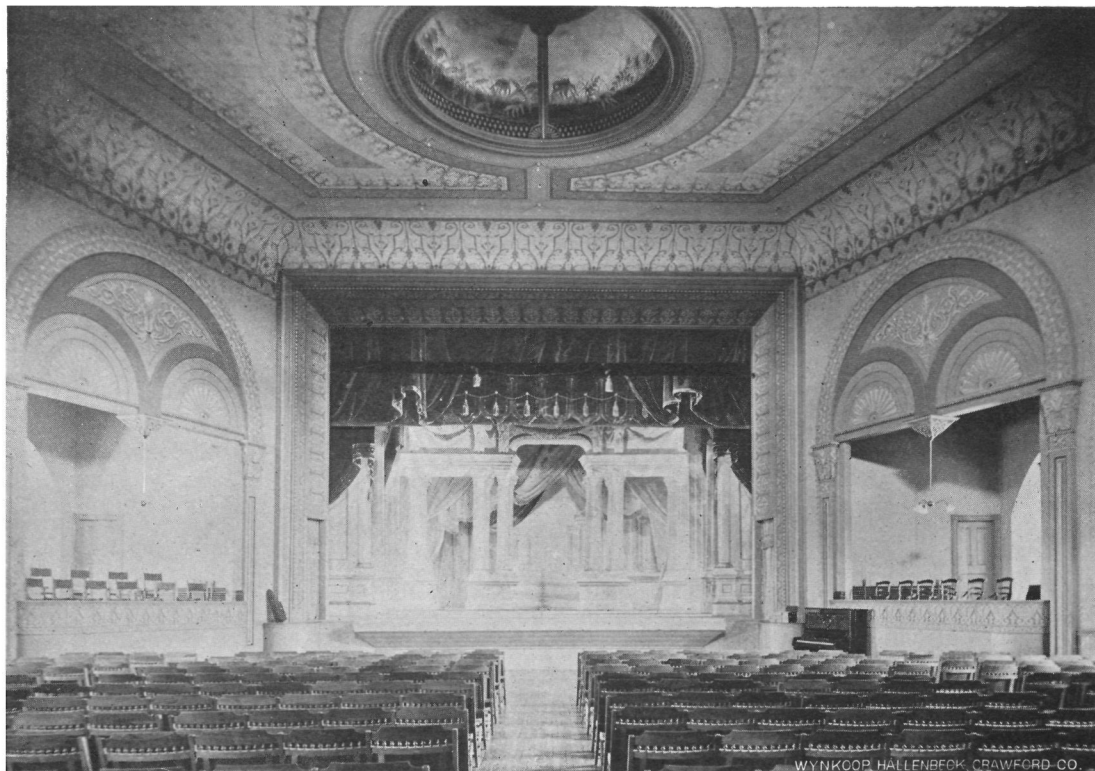
Contributions of reading material have been received as follows:

- American Baptist Flag, St. Louis, Mo., 1 copy.
- Attica News, Attica, N. Y., 1 copy.
- Auburn Weekly Bulletin, Auburn, N. Y., 1 copy.
- Allegany County Democrat, Wellsville, N. Y., 2 copies.
- Albion Free Lance, Albion, N. Y., 1 copy.
- Addison Advertiser, Addison, N. Y., 1 copy.
- Auburn Democrat and Argus, Auburn, N. Y., 1 copy.
- Batavia Daily News, Batavia, N. Y., 1 copy.
- Batavian, Batavia, N. Y., 1 copy.
- Cayuga Chief, Weedsport, N. Y., 1 copy.
- Castilian, Castile, N. Y., 1 copy.
- Christian Uplook, Buffalo, N. Y., 1 copy.
- Cohocton Times, Cohocton, N. Y., 1 copy.
- Caledonia Advertiser, Caledonia, N. Y., 1 copy.
- Cayuga County Independent, Auburn, N. Y., 1 copy.
- Cuba Patriot, Cuba, N. Y., 1 copy.
- Clyde Times, Clyde, N. Y., 1 copy.

Deaf-Mute Journal, New York city, 1 copy.
Dansville Advertiser, Dansville, N. Y., 1 copy.
Democratic Herald, Clyde, N. Y., 1 copy.
Dryden Herald, Dryden, N. Y., 1 copy.
Farmer Review, Farmer, N. Y., 2 copies.
Geneva Advertiser, Geneva, N. Y., 1 copy.
Geneva Gazette, Geneva, N. Y., 1 copy.
Geneva Courier, Geneva, N. Y., 1 copy.
Groton and Lansing Journal, Groton, N. Y., 1 copy.
Holley Standard, Holley, N. Y., 1 copy.
Hammondsport Herald, Hammondsport, N. Y., 1 copy.
Hornellsville Times, Hornellsville, N. Y., 1 copy.
Hornellsville Weekly Tribune, Hornellsville, N. Y., 1 copy.
Ithaca Daily News, Ithaca, N. Y., 3 copies.
Ithaca Democrat, Ithaca, N. Y., 1 copy.
Livingston Republican, Geneseo, N. Y., 1 copy.
Lake Shore News, Wolcott, N. Y., 1 copy.
LeRoy Gazette, LeRoy, N. Y., 1 copy.
Livonia Gazette, Livonia, N. Y., 2 copies.
Montour Falls Free Press, Montour Falls, N. Y., 1 copy.
Mount Morris Enterprise, Mt. Morris, N. Y., 1 copy.
Naples Record, Naples, N. Y., 1 copy.
Orleans American, Albion, N. Y., 1 copy.
Oakfield Reporter, Oakfield, N. Y., 1 copy.
Ovid Gazette, Ovid, N. Y., 2 copies.
Ovid Independent, Ovid, N. Y., 2 copies.
Ontario County Times, Canandaigua, N. Y., 1 copy.
Ontario County Journal, Canandaigua, N. Y., 4 copies.
Prattsburg News, Prattsburg, N. Y., 1 copy.
Perry Herald and News, Perry, N. Y., 2 copies.
Penn Yan Express, Penn Yan, N. Y., 1 copy.
Penn Yan Democrat, Penn Yan, N. Y., 1 copy.
Seneca County Courier, Seneca Falls, N. Y., 1 copy.
Seneca County Journal, Seneca Falls, N. Y., 1 copy.
Seneca County News, Waterloo, N. Y., 1 copy.
Seneca County News Letter, Geneva, N. Y., 1 copy.



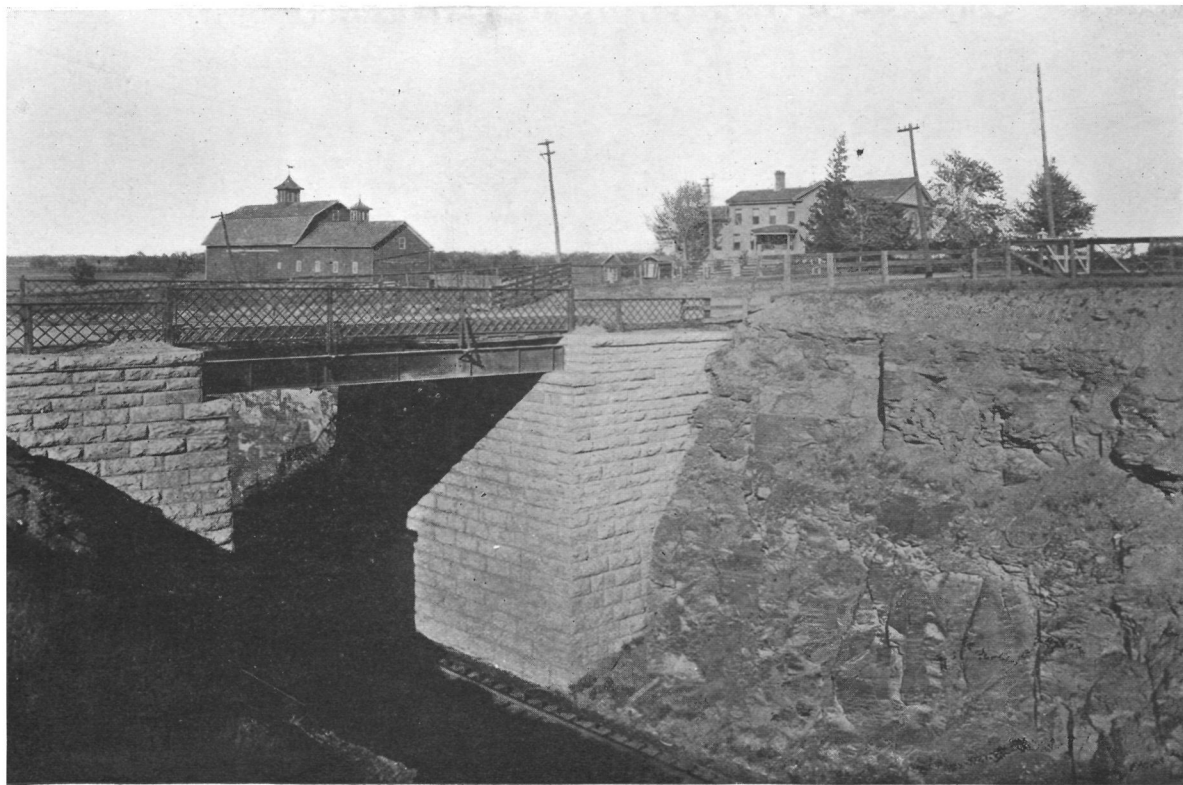
WILLARD STATE HOSPITAL.—AMUSEMENT HALL.



WILLARD STATE HOSPITAL.—INTERIOR OF AMUSEMENT HALL.



WILLARD STATE HOSPITAL.—BIRD'S-EYE VIEW LOOKING TOWARDS THE LAKE FROM THE BRANCH.



WILLARD STATE HOSPITAL.—VIEW OF "HILLSIDE" AT LEHIGH VALLEY RAILROAD CROSSING.



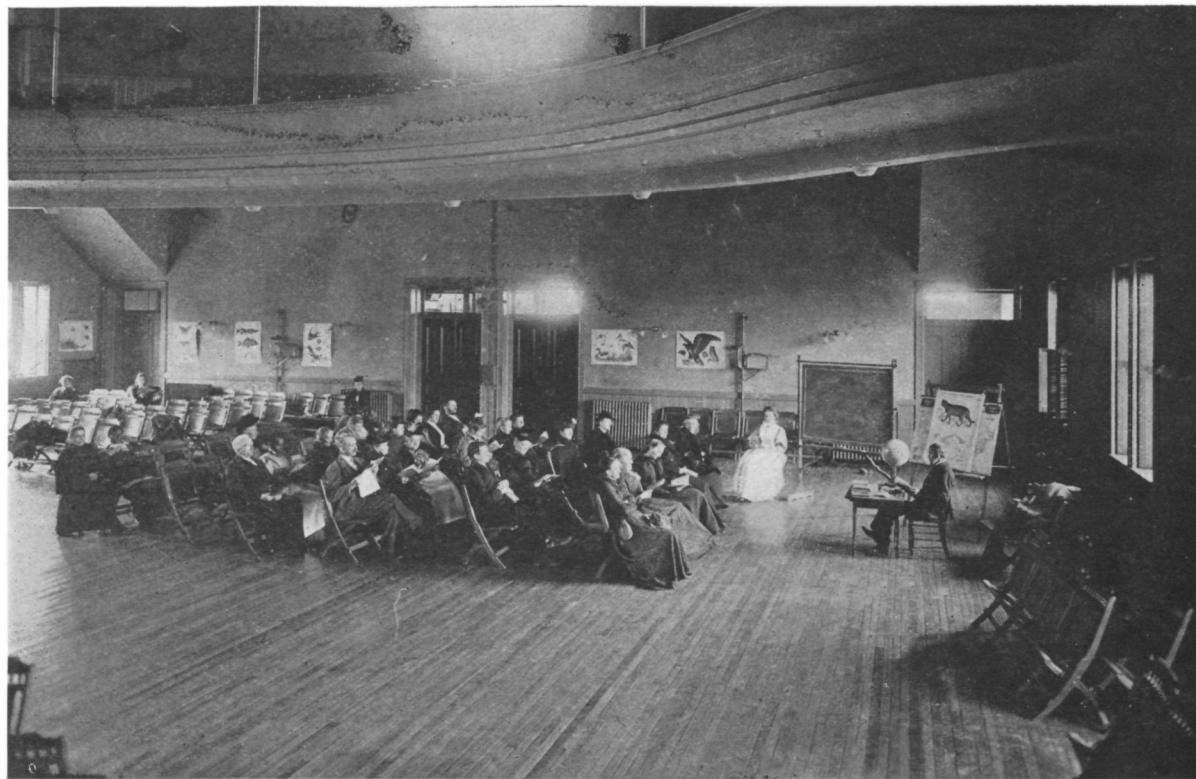
WILLARD STATE HOSPITAL.—SEWING ROOM.



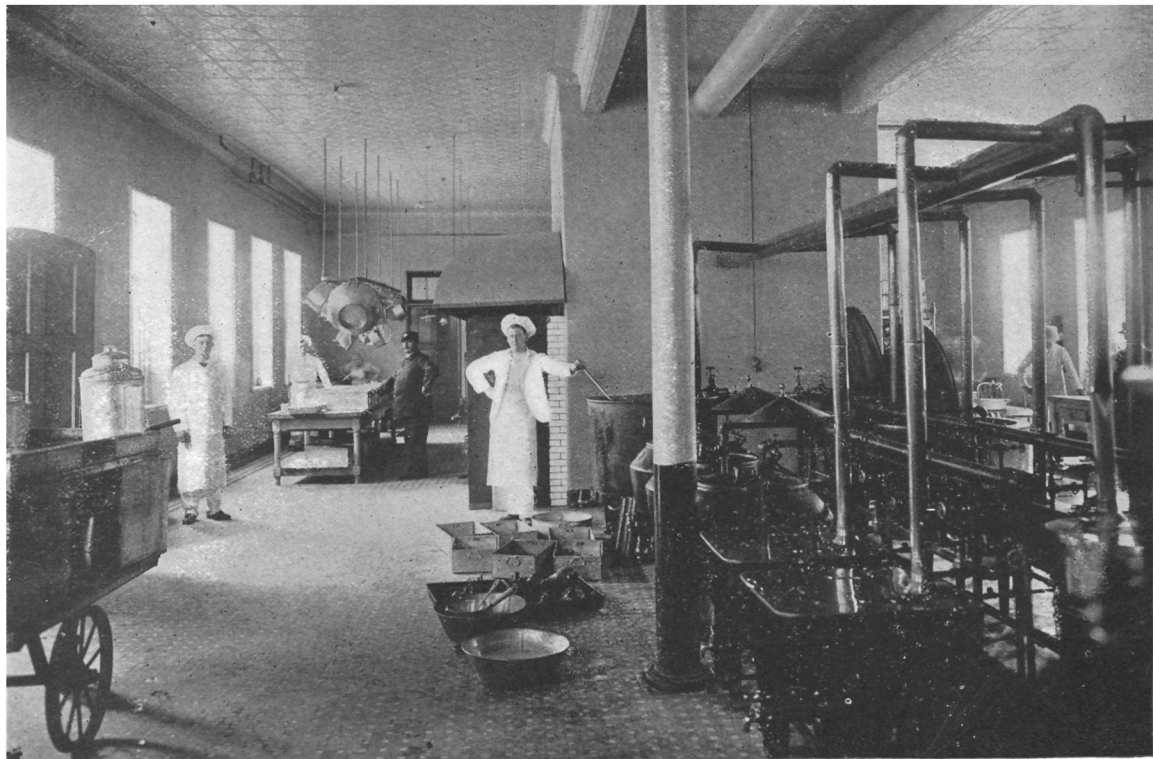
WILLARD STATE HOSPITAL.—SHOEMAKER'S SHOP.



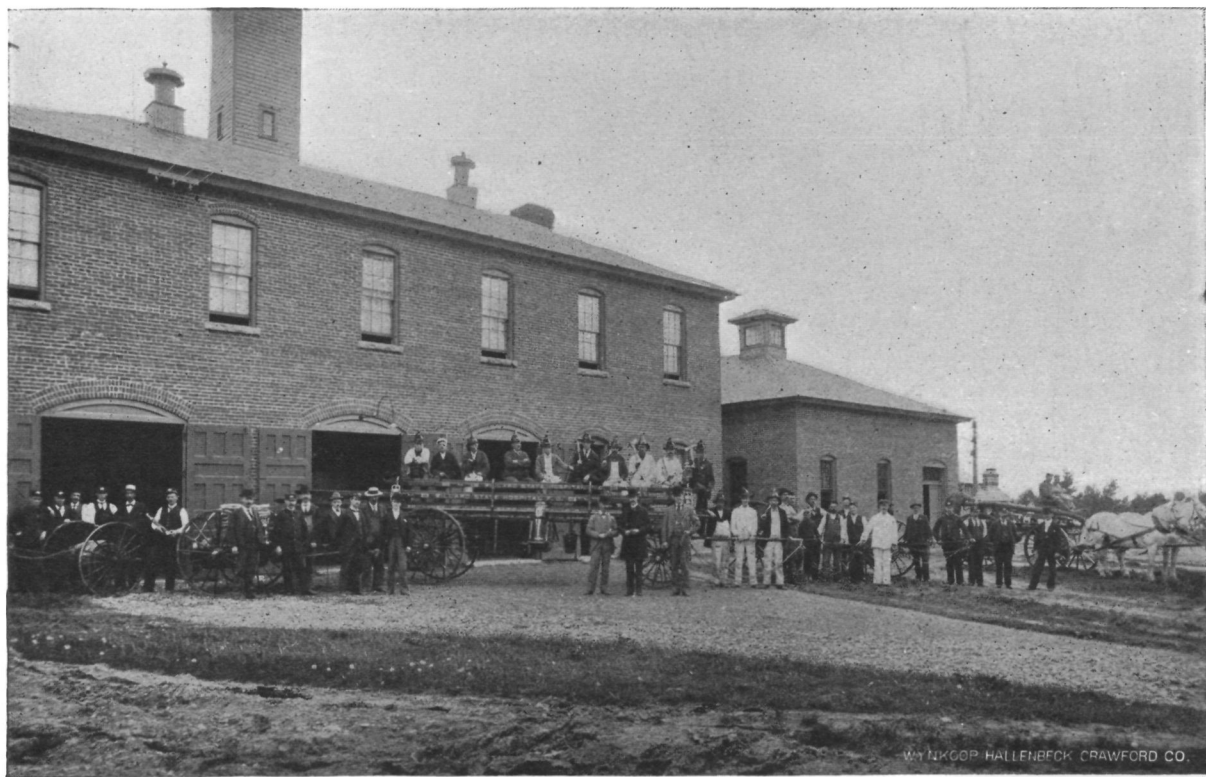
WILLARD STATE HOSPITAL.—VIEW OF THE LAKE FRONT AT THE MAIN BUILDING.



WILLARD STATE HOSPITAL.—SCHOOL FOR PATIENTS.

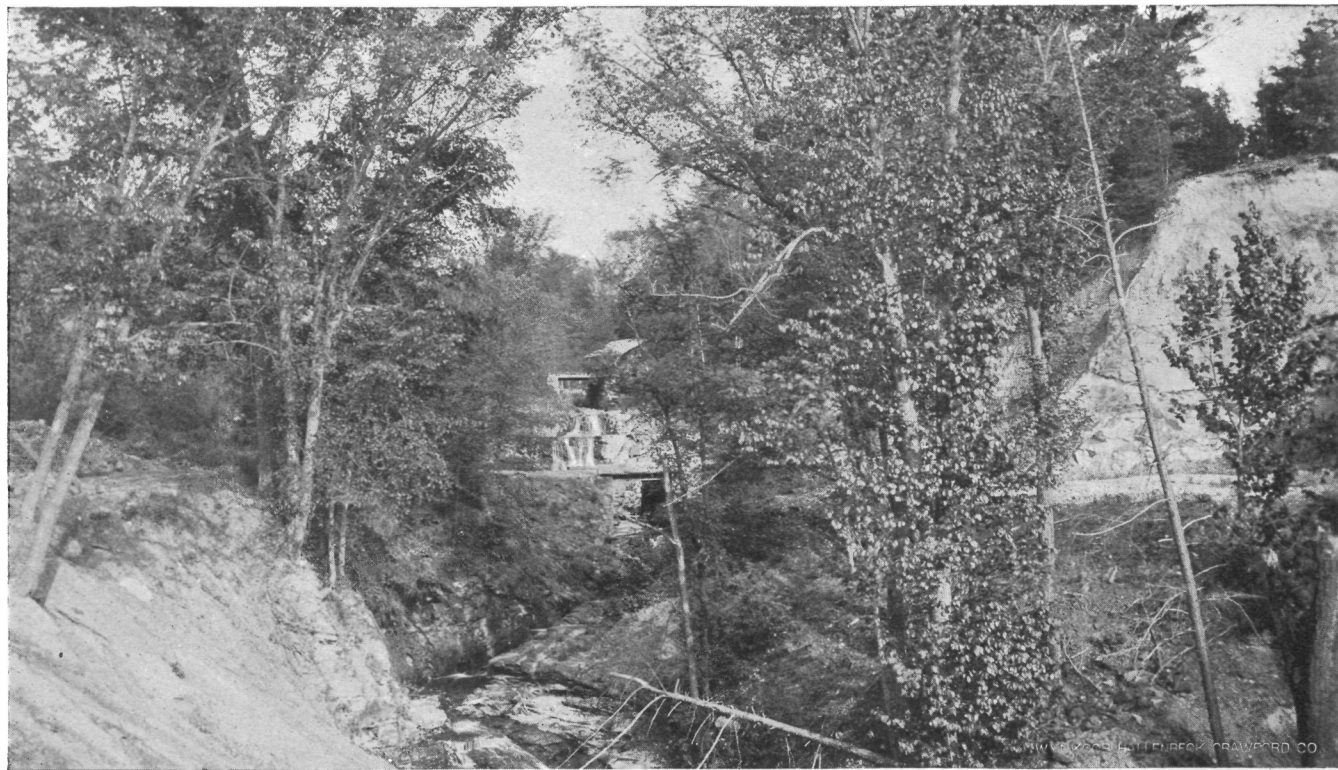


WILLARD STATE HOSPITAL.—MAIN KITCHEN.



WYIKGOP HALLENBECK CRAWFORD CO.

WILLARD STATE HOSPITAL.—FIRE COMPANY AND FIRE ENGINE HOUSE.



WILLARD STATE HOSPITAL.—A GLIMPSE OF THE RAVINE.



WILLARD STATE HOSPITAL.—LAKE VIEW IN FRONT OF HOSPITAL.



WILLARD STATE HOSPITAL.—VIEW OF SENECA LAKE SOUTH OF MAIN BUILDING.



WILLARD STATE HOSPITAL.—AFTERNOON VIEW FROM FRONT OF MAIN BUILDING.



WILLARD STATE HOSPITAL.—A PORTION OF THE HOLSTEIN HERD.



WILLARD STATE HOSPITAL.—TEAMS AT THE BARN.

Seneca Falls Reveille, Seneca Falls, N. Y., 3 copies.
Southern Steuben Republican, Woodhull, N. Y., 1 copy.
Spirit of the Times, Batavia, N. Y., 1 copy.
Steuben Courier, Bath, N. Y., 1 copy.
Steuben Farmers' Advocate, Bath, N. Y., 1 copy.
Truth, Catholic Magazine, Raleigh, N. C., 1 copy.
Union Springs Advertiser, Union Springs, N. Y., 1 copy.
Victor Herald, Victor, N. Y., 1 copy.
Waterloo Observer, Waterloo, N. Y., 1 copy.
Watkins Express, Watkins, N. Y., 1 copy.
Watkins Democrat, Watkins, N. Y., 1 copy.
Watkins Review, Watkins, N. Y., 1 copy.
Union and Advertiser, Wayland, N. Y., 1 copy.
Yates County Chronicle, Penn Yan, N. Y., 2 copies.
New York Herald, New York, 24 copies.

SPECIAL ACKNOWLEDGMENTS

I desire again to particularly acknowledge the assistance and help that has been given to us by the New York city board of health, in connection with the work that we have done in fighting the epidemic of diphtheria at this hospital, and in particular to recognize the courtesy and kindness received, both for the institution and in a personal way, in this matter from Dr. Hermann M. Biggs and Dr. William H. Park.

OFFICIAL VISITS

The members of your Board and members of the State Commission in Lunacy have visited the hospital from time to time during the past year.

Although a great many people visit the hospital first and last, and it hardly seems possible to make a record of visitors, that would be of special importance because of this fact, and for the reason that many people come to the hospital without always

making themselves known to us, we deem it well to follow the old custom of acknowledging the visits of the following:

Hon. Otto Kelsey.

Dr. Everett Flood, Epileptic Hospital, Palmer, Mass.

Dr. Ernest Scribner, superintendent Worcester, Mass., insane asylum.

Dr. H. E. Allison.

In conclusion I wish to express to your Board and through your Board to the Lunacy Commission, my appreciation of the treatment that has been accorded to me in this work during the past year.

Very respectfully yours.

WM. AUSTIN MACY

Medical Superintendent

NOTES OF VISITATION OF THE PRESIDENT OF THE COMMISSION OF
VISIT ON MARCH 16, 17, 1900. VISITATIONS OF COMMIS-
SIONER PARKHURST HAVE NOT BEEN RECORDED

Dr. Macy, superintendent, was present and on duty, although suffering to a degree from neuralgia, and should have been in bed. All medical staff, except Dr. Waldo, on duty. Dr. Waldo on his annual vacation. Steward and matron on duty.

The weather very severe, snow about a foot deep, and wind blowing 40 miles. Western portions of main building, especially on the 15th, were quite cold.

All patients admitted since previous visit, still remaining in the institution, were seen and examined, and also all patients who had requested to see the Commissioners. There were no complaints of abuse offered, some complaints of electrical persecution excepted.

Since the previous visit a static and X-ray cabinet has been made from the old annex clerk's office. It is in good working condition and was tested for me. The superintendent reports it is given frequent practical use, and is a valuable adjunct to the armamentarium, and I have no doubt of it.

The medical staff were seen at the noon conference on the 15th, and the attendance was complete. The medical men are interested and there seems to be a live and healthy medical spirit pervading the work. It still seems to me that the elements of study which characterizes the favorable from the unfavorable cases should be given more attention and time. Admitting the difficulties of classification, much might be accomplished by the influence of location in different stages of the disease.

The superintendent proposes the construction of two annexes, to corridors leading to north and south wings, the one on the north side to provide a room for the reception and examination of patients, and submits a plan. I approve of this, but suggest it should be made larger than proposed, so as to furnish several beds and facilities to keep a patient over night, in case examination is delayed. There are no accommodations for this service now, and it is very desirable. Patients then, before entering the wards proper, could receive the preliminary examination, receive a bath, have the clothing sterilized, and remove all dangers of infection. During this period, also, a better classification could be determined.

On the south corridor, an annex to be used for the dentist and ophthalmologist is desired. Also a room for occasional training school clinics. Although this is desirable, the former room is more so, and should be constructed in preference.

A large number of wires, telephone, telegraph, etc., emerge from the main building on south side and are carried over the roof. Besides being an eyesore, they are a menace to the safety of the roof. It seems at inconsiderable expense they might be carried by cable through the basement and out to the rear of the buildings where they could be distributed to poles.

The plumbing in the south wing needs some extraordinary repairs, and can not last much longer. It seems that the first most desirable change should be the creation of the general bathroom. The superintendent makes a suggestion which is highly approved, that a general linen room for the wing should be made adjacent to the general bath. This would relieve the

linen room for each ward, and would also increase the efficiency of the service. He is requested to study this question in its several phases, and present his views to the Commission.

At a cost of about \$900, the material and labor necessary to complete the fire lines about all the hospital buildings under the plans of Manning, and it seems desirable that this should be done.

By the use of the old hoppers and some old material taken out of the north wing, a water flush closet system can be put in the Meddick house in place of the dry earth closets, discharging into a cess pool, at a total cost of \$264. This seems desirable and is approved.

In the convalescent ward, south, a great improvement in appearance could be made by dressing the windows, and in this ward some lace or scrim curtains might be hung. In other wards white cotton curtains, embroidered where feasible by patients, will be sufficient.

A few bureaus or chiffoniers in the hospital wards are needed; also several plain couches.

The detached buildings were visited March 17th. The temperature was 0°F. The wards were all comfortable, although a strong west wind was blowing. Infirmary and branch also visited.

At detached buildings 2 and 4 an improvement is a new method of hanging dresses in clothes rooms. Dresses are also ironed to a large extent.

At the branch, the paper has been removed from the walls, and walls have been painted, improving their appearance. An application is made for material and labor to widen the doors. The walls are heavy, and the work would be quite expensive. It seems certainly desirable to widen doors between wards in bath and dining rooms, to allow easy passage of stretchers and wheel chairs.

At detached groups the floors in the dining rooms are now being polished successfully and is an improvement.

The locomotive house is in bad condition and should be rebuilt soon. The late fire has taken off the roofing.

At detached building 3 it seems very desirable to make pantries adjacent to the dining rooms similar to the ones at detached building 1, but somewhat larger. This is especially desirable and should be done soon. The polishing of the floors and tables is a decided improvement. There are 288 patients.

At detached building 1, the floor in kitchen is becoming quite bad. It is a wood floor, and the constant wetting is rotting it. It would seem that in renewal a tile or asphalt floor should be put down. There are 276 patients.

At branch building the bathroom is in bad shape and needs repairs. The steam has broken the ceiling plaster. Two old iron tubs are the bathing facilities, which should be replaced with a spray.

In the laundry a new extractor and two new washing machines are needed for soiled clothes. Otherwise the laundry seems well-equipped.

A chicken and milk house is wanted. This is a question which should receive careful attention. It is quite certain that some provision should be made for milk, and it appears to me that a small house midway between the two cowbarns, suitably equipped, would be the best solution.

The main steam pipe is reported as nearly worn out. The near visit of Engineer Hale will consider this matter. It has been in use thirty years.

It seems desirable to complete the sand dock across the lake, and provide two dump cars. The whole cost is estimated at \$200.

The superintendent applies for a walk from the new station to the hospital. Some sort of a walk is desirable, but a cement walk is expensive.

He also desires man-holes over valves of the water main at a cost of \$405. This is a question for the consulting engineers.

It is desirable to put gutters and eaves around the storehouse, rear east and cold storage.

Small steam tables in the six dining rooms of the main building are desirable. The cost is estimated at \$285, which includes installation.

There are various repairs to buildings which are reported as extraordinary, such as roofs, etc. The main building certainly needs a coat of paint exteriorly. The roofs also need some repairs.

A short extension of machine shop is desired, and some additional machinery. If funds are available this is probably profitable, and would add to convenience in making repairs.

I am favorable to the construction of a building for eighty employees, when funds permit. This will furnish accommodation also for at least sixty patients.

Considering the state of the weather, I have made as thorough inspection as possible. As a whole the condition of the hospital is satisfactory and appears very well. The discipline seems good, and complaints of patients are very few. At the present time there is no case of infectious disease in the hospital.

I believe a good fire alarm is necessary.

P. M. WISE

WILLARD, N. Y., *March 17, 1900*

NOTES OF OFFICIAL VISIT OF COMMISSIONERS OSBORN AND PARK-
HURST, MAY 16TH AND 17TH, 1900

Dr. Macy in attendance: the Commissioners were also gratified by visits from Messrs. Osborne, Peterson and Partridge.

The suggestions of Manager Osborn relative to a gravity water supply, were discussed extensively, and the outbreaks of water along the ridge on which Ovid stands, were examined in detail. The matters of water supply and plumbing are brought strongly up by a new outbreak of diphtheria in the hospital, some sixteen cases and ten suspected cases having appeared since April 15th. The present water supply from the lake is polluted by the sewage not only of the hospital but of several towns and villages, and this condition is likely to increase; again, the cost of pumping is nearly \$3,000 a year. There is evidence

of a large supply of pure water on the ridge, about three miles east of and 300 feet above the hospital. It is recommended that the extent and quality of this supply be studied systematically and with the aid of a man experienced in water supply questions. Further, that options on available sources be obtained and that the compensation of owners of riparian rights be considered as one element of the problem. It was suggested by Dr. Macy that the use of water could be divided so as to have for sprinkling, fire boilers, closets, etc., the brook water which now runs down from near Ovid, and to have for all points where water is likely to be used for drinking, a supply from some spring on the ridge; this plan seems feasible. The coming summer should be used to determine the character of the supply, etc., and plans should be matured in the meanwhile for its utilization.

The requests for construction and extraordinary repairs for the year were examined in detail and on the spot, and Dr. Macy was asked to send estimates for a list of his requests, which were recommended.

The hospital and grounds were examined and found to be in excellent general condition, but owing to the diphtheria, detached building 1 and the branch were quarantined and could not be visited.

The condition of the legal affairs of the hospital was discussed by Attorney Partridge and the legal member of the Commission.

WM. CHURCH OSBORN

WM. L. PARKHURST

May 17, 1900.

NOTES OF OFFICIAL VISIT OF COMMISSIONERS OSBORN AND PARKHURST ON THE 12TH, 13TH, AND 14TH OF SEPTEMBER, 1900, ACCOMPANIED BY SECRETARY MCGARR; DR. MACY BEING PRESENT AND IN ATTENDANCE UPON THE COMMISSION

The medical staff was all at the hospital with the exception of Dr. Wm. L. Russell.

Since the last visit of the Commission, the locomotive house has been advanced and is about to be roofed in.

The gutters and windows on the storehouse are well advanced.

The new laundry washers and wringers are ready for installation.

The "Hillside" addition is inclosed, and the plumbing is advanced. The cost of the walk to the depot has been $4\frac{3}{4}$ cents per square foot for material, and it presents a very neat and satisfactory appearance. It is practically completed.

While an examination of the buildings and management of the hospital shows thorough care and good management in all particulars, it cannot fail to develop the fact that the facilities of this institution are, in several respects, inadequate and unsanitary. The condition of the plumbing has already been commented upon and the plans for the replumbing of the south wing are well advanced, but it is evident that the plumbing throughout the institution, with the exception of the north wing, must be replaced as rapidly as possible.

Another serious defect in the service of the hospital is found in the pantries which are uniformly too small and badly located as well as inadequately supplied. A number of the dining-rooms, also, are too small.

The subject of water supply was noticed in full at the last previous visit, but it should be noted here that since that time the superintendent has instituted a systematic and thorough study of the problems presented, and that a solution of the question should be had within a short time.

The summer has been one of protracted drouth and the effect upon the farm has been deplorable, and, although the gardens have done better, this department of the hospital has suffered severely. In view of the possibility of a recurrence of such seasons, it seems desirable to install additional silos with a view to obtaining the large crops from corn land.

The superintendent stated that the preparation of plans and estimates for the new construction work requested for the ensuing year would be more than the present force could undertake, and on consideration it was suggested that he communicate with the State Architect and ask him to send a competent

man to spend sufficient time here to develop plans and specifications for the new construction recommended by the Commissioners in the following list. It was also concluded that in undertaking the additional work men should be employed specially for that purpose rather than by making permanent additions to the force of attendants.

The plans and detailed estimate for the proposed clinic room east of the circular corridors were submitted, and Dr. Macy was requested to forward an estimate therefor to the Commission.

The superintendent was requested to furnish a detailed plan, specifications and estimate for the construction of a connecting corridor and pantry in connection with detached building 3, where it seemed most desirable.

The railroad trestles were found to be too light to carry coal cars, and Dr. Macy's estimate for rebuilding them was requested.

The following list was presented by Dr. Macy, and recommended, subject to marginal notes:

New floors	\$1,200 00
Forcing house for garden (figures and design to be sent)	2,500 00
Tile at detached building 4 to carry off water.....	75 00
Irrigating pipe in garden (\$500 recommended).....	1,270 82
Radiators for detached buildings 1 and 3 and main building; radiators for detached building 2, wards 6 and 7, and attendants' home.....	1,388 48
Ventilation of detached building 1, kitchen.....	150 00
Cement walks in south yard.....	.....
Cold storage (enclose driveway and improve ventilation; retaining natural ice).....	12,000 00
Sidewalks, etc.	500 00
Repairs to roof and painting.....	700 00
Renewals to plumbing	20,000 00
Extension and renewals in fencing.....	500 00
Change in water supply.....	25,000 00
Tile floors in kitchens (detached building 1 and infirmary)	1,800 00

Increased barn room ("Hillside " and Lake Farm).	\$1,100 00
Extension to kitchen	675 00
Two silos	800 00
Change in fan-room	275 00
Dressing-room and staircase on north wing.....	.....
Enlarging boot rooms.....	800 00
Connecting corridors, detached building 3.....	500 00
Extension of wagon sheds.....	590 00
Changing baths to sprays (disallowed).....	2,500 00
Two attendants' homes (disallowed).....	50,000 00
Chicken houses (\$1,000 recommended).....	4,000 00
Rebuilding Van Vleet house (disallowed).....	7,000 00
Dry room, dry kiln and seasoning room.....	215 00
Enlargement of machine shop.....	395 00
Machine shop equipment (disallowed).....	5,000 00

WM. L. PARKHURST

WM. CHURCH OSBORN

REPORT OF THE TREASURER

To the Board of Managers of the Willard State Hospital:

Gentlemen.—The undersigned, the treasurer of the Willard State Hospital, respectfully submits the following statement of receipts and disbursements for the year ending September 30, 1900:

Receipts

Total balance on hand September 30, 1899.....	\$496 91
---	----------

This was divided into the following accounts and amounts:

Balance to salaries	\$40 00
Balance to wages.....	377 88
Balance to supplies.....	79 03

\$496 91

Received from State Comptroller, salaries.....	18,552 15
Received from State Comptroller, wages.....	125,862 00
Received from State Comptroller, supplies.....	211,800 00
Received from reimbursing patients.....	20,047 91
Received from private patients.....	599 83
Received from M. J. Gilbert, steward's sales.....	1,894 93
Received from cash refunded.....	76 65
Received from manufacturing department.....	10,852 16
Received from interest.....	355 71
Received from State Comptroller, chapter 570, Laws of 1899.....	2,073 62
Received from State Comptroller, chapter 364, Laws of 1900.....	5,976 48

Total receipts	\$398,588 35
----------------------	--------------

**Disbursements*

To pay vouchers for the following estimates:

Estimate No. 1, salaries	\$18,567 17
Estimate No. 2, wages	125,966 66
Estimate No. 3, provisions and stores.....	111,433 84

Estimate No. 4, ordinary repairs	\$9,320 94
Estimate No. 5, farm and grounds.....	10,652 73
Estimate No. 6, clothing	15,095 34
Estimate No. 7, furniture and bedding.....	7,760 23
Estimate No. 8, books and stationery.....	2,384 22
Estimate No. 9, fuel and light	30,212 68
Estimate No. 10, medical supplies	3,759 70
Estimate No. 11, miscellaneous expenses	10,334 87
Estimate No. 12, transportation of patients	4,692 44
Clothing manufacturing department.....	15,711 87
Special funds, chapter 570, Laws of 1899.....	2,073 62
Special funds, chapter 364, Laws of 1900.....	5,976 48
State Treasurer, sundry receipts.....	22,542 26
Balance on hand, as of September 30, 1900.....	2,103 30
Total	<u>\$398,588 35</u>

Classification of Balances

Balance to salaries.....	\$24 98
Balance to wages.....	273 22
Balance to supplies.....	144 01
Balance to manufacturing.....	1,661 09
	<u>\$2,103 30</u>

Dated October 18, 1900.

Respectfully submitted

HENRY PETERSON

Treasurer

REPORT OF STEWARD

WM. AUSTIN MACY, Esq., M. D., *Medical Superintendent, etc.:*

Dear Sir.—I respectfully submit herewith the report of the steward's department for the year ending September 30, 1900.

Respectfully

M. J. GILBERT

Steward

The following report of the farm and garden products, stock on hand, articles manufactured, and the classification and summary of expenditures for maintenance, for the year ending September 30, 1900, is respectfully submitted:

FARM PRODUCTS

Alfalfa hay, 35 tons at \$6 and 42 tons green hay at \$2	\$294 00
Apples, 2,755 bushels, at 30 cents.....	826 50
Apples, 493 bushels, at 40 cents.....	157 20
Beef, 27,441 pounds, at 6 cents.....	1,646 46
Corn, late, ear, 2,065 bushels, at 75 cents.....	722 75
Corn fodder, 30 tons, at \$3.....	90 00
Corn fodder, 166 tons, at \$4.....	664 00
Corn stalks, 60 tons, at \$3.....	180 00
Chickens, 674 pounds, at 10 cents.....	67 40
Ducks, 88 pounds, at 10 cents.....	8 80
Ducks, 30 pounds, at 12 cents.....	3 60
Eggs, 689½ dozen, at 12 cents.....	82 74
Eggs, 290 dozen, at 13 cents.....	37 70
Eggs, 86 dozen, at 15 cents.....	12 90
Eggs, 56 dozen, at 17 cents.....	9 52
Eggs, 120 dozen, at 18 cents.....	21 60
Eggs, 184 dozen, at 20 cents.....	36 80
Ensilage, 30 tons, at \$3.....	90 00
Grapes, 10,300 pounds, at 2 cents.....	206 00
Hay, 218½ tons, at \$10.....	2,185 00

Hay, 12 tons, at \$12.....	\$144 00
Hides, 74 pounds, at 5 cents.....	3 70
Hides, 1,056 pounds, at 6 cents.....	63 36
Hides, 1,564 pounds, at 8½ cents.....	132 94
Sheep pelts, 4, at 25 cents each.....	1 00
Lamb pelts, 4, at 35 cents each.....	1 40
Lamb pelts, 8, at 50 cents each.....	4 00
Lamb pelts, 8, at 80 cents each.....	6 40
Veal skins, 177 pounds, at 10 cents.....	17 70
Veal skins, 17, at \$1.53 each.....	26 01
Kip, 1	1 00
Lamb, 154 pounds, at 6¾ cents.....	10 40
Geese, 40 pounds, at 12 cents.....	4 80
Milk, 34,628 quarts, at 2 cents.....	692 56
Milk, 461,247 quarts, at 2½ cents.....	11,531 18
Mangel wurzel, 13,800 bushels, at 20 cents.....	2,760 00
Mutton, 630 pounds, at 6¾ cents.....	42 53
Oats, 3,026 bushels, at 30 cents.....	907 80
Pork, 47,449 pounds, at 5½ cents.....	2,609 70
Potatoes, 4,549 bushels, at 40 cents.....	1,819 60
Potatoes, 430 bushels, at 45 cents.....	193 50
Potatoes, 418 bushels, at 50 cents.....	209 00
Potatoes, 33 bushels, at 60 cents.....	19 80
Straw, 115 tons, at \$4.....	460 00
Turkeys, 558 pounds, at 12 cents.....	66 96
Wheat, 6 bushels, at 70 cents.....	4 20
Wheat, 2,033 bushels, at 74 cents.....	1,504 42
Wheat, 8 bushels, at 75 cents.....	6 00
Total	<u>\$30,586 93</u>

GARDEN PRODUCTS.

Asparagus, 151 bushels, at 30 cents.....	\$45 30
Beans, lima, 55 bushels, at \$1.....	55 00
Beans, string, 45 bushels, at 50 cents.....	22 50
Beets, 1,141 bushels, at 25 cents.....	285 25

Cabbage, 16,803 heads, at 2 cents.....	\$336 06
Cabbage, 60 heads, at 3 cents.....	1 80
Cabbage, 3,126 heads, at 4 cents.....	125 04
Carrots, 150 bushels, at 30 cents.....	45 00
Cauliflower, 411 heads, at 5 cents.....	20 55
Cauliflower, 50 heads, at 10 cents.....	5 00
Celery, 4,762 heads, at 3 cents.....	142 86
Corn, sweet, 269 bushels, at 25 cents.....	67 25
Corn, 61 bushels, at 40 cents.....	24 40
Cucumbers, 198, at 5 cents each.....	9 90
Cucumbers, 25 bushels, at 25 cents.....	6 25
Cucumbers, 11 bushels, at 50 cents.....	5 50
Currants, 1,075 pounds, at 4 cents.....	43 00
Lettuce, 1,468 heads, at 4 cents.....	58 72
Lettuce, 26 bushels, at 30 cents.....	7 80
Lettuce, 118 bushels, at 40 cents.....	47 20
Onions, green, 244 bushels, at 50 cents.....	122 00
Onions, 4 bushels, at 60 cents.....	2 40
Parsnips, 533 bushels, at 35 cents.....	186 55
Parsley, 122 bunches, at 3 cents.....	3 66
Peas, 59 bushels, at 50 cents.....	29 50
Peas, 48 bushels, at \$1.....	48 00
Peaches, 51 bushels, at 75 cents.....	38 25
Pears, 55 bushels, at 50 cents.....	27 50
Peppers, 6 bushels, at 75 cents.....	4 50
Plums, 18 bushels, at 75 cents.....	13 50
Radishes, 23 bushels, at 50 cents.....	11 50
Raspberries, 1,797 quarts, at 6 cents.....	107 82
Rhubarb, 561 bushels, at 25 cents.....	140 25
Rhubarb, 9 barrels, at 50 cents.....	4 50
Squash, summer, 20 bushels, at 25 cents.....	5 00
Squash, winter, 345 bushels, at 40 cents.....	138 00
Strawberries, 526 quarts, at 7 cents.....	36 82
Swiss chard, 100 bushels, at 15 cents.....	15 00
Swiss chard, 40 barrels, at 45 cents.....	18 00
Spinach, 22 bushels, at 20 cents.....	4 40

Spinach, 116 bushels, at 30 cents.....	\$34 80
Tomatoes, 884 bushels, at 25 cents.....	221 00
Tomatoes, 4 bushels at 50 cents.....	2 00
Turnips, 938 bushels, at 25 cents.....	234 50
Total	<u>\$2,803 83</u>
All other products, sales and rents properly credited to farm and grounds.....	543 00
Total farm and garden products.....	<u><u>\$33,933 76</u></u>

Debit

Amount charged to farm and grounds.....	\$10,652 73
Amount of farm wages.....	5,076 17
All articles of produce used as food for cows, hogs, sheep and fowls	8,157 00
Net profit to balance.....	10,047 86
	<u><u>\$33,933 76</u></u>

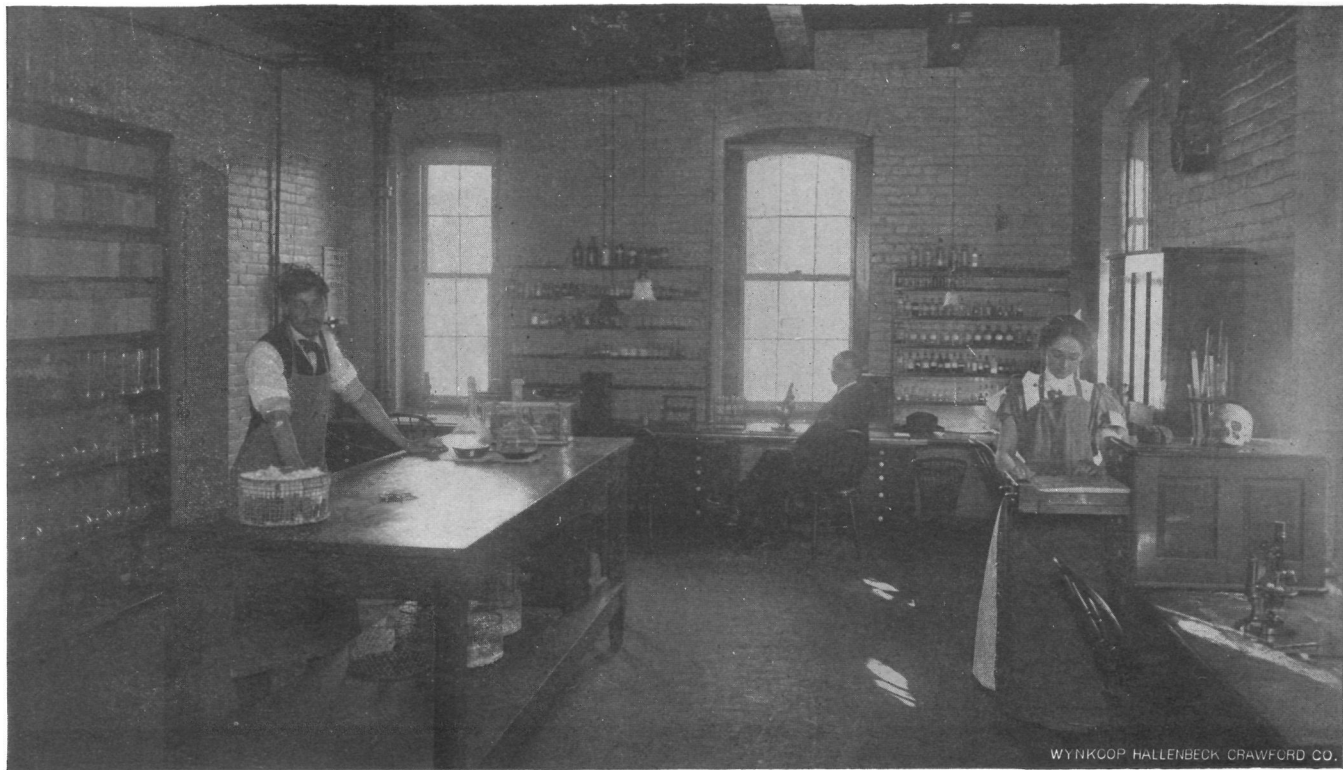
FARM STOCK ON HAND SEPTEMBER 30, 1900

Horses	39
Colts	7
Mules	2
Bulls	4
Cows	163
Heifers, 2-year old.....	9
Heifers, 1-year old.....	25
Calves, heifers	27
Boars	3
Breeding sows	37
Hogs, fat	115
Shoats	84
Pigs	90
Sheeps	53
Lambs	4



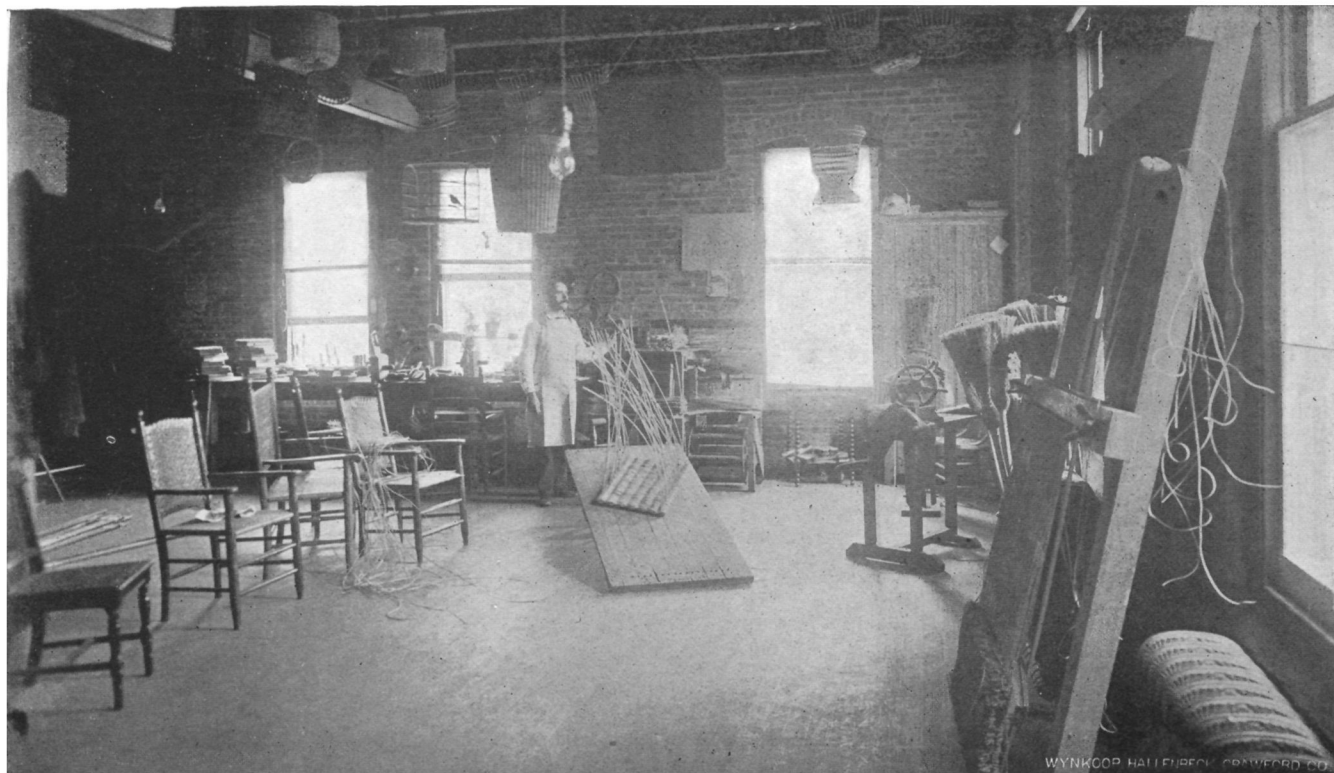
WYNKOOP HALLENBECK CRAWFORD CO.

WILLARD STATE HOSPITAL.—INTERIOR OF SHOE-SHOP.



WYNKOP HALLENBECK CRAWFORD CO.

WILLARD STATE HOSPITAL.—INTERIOR OF LABORATORY.



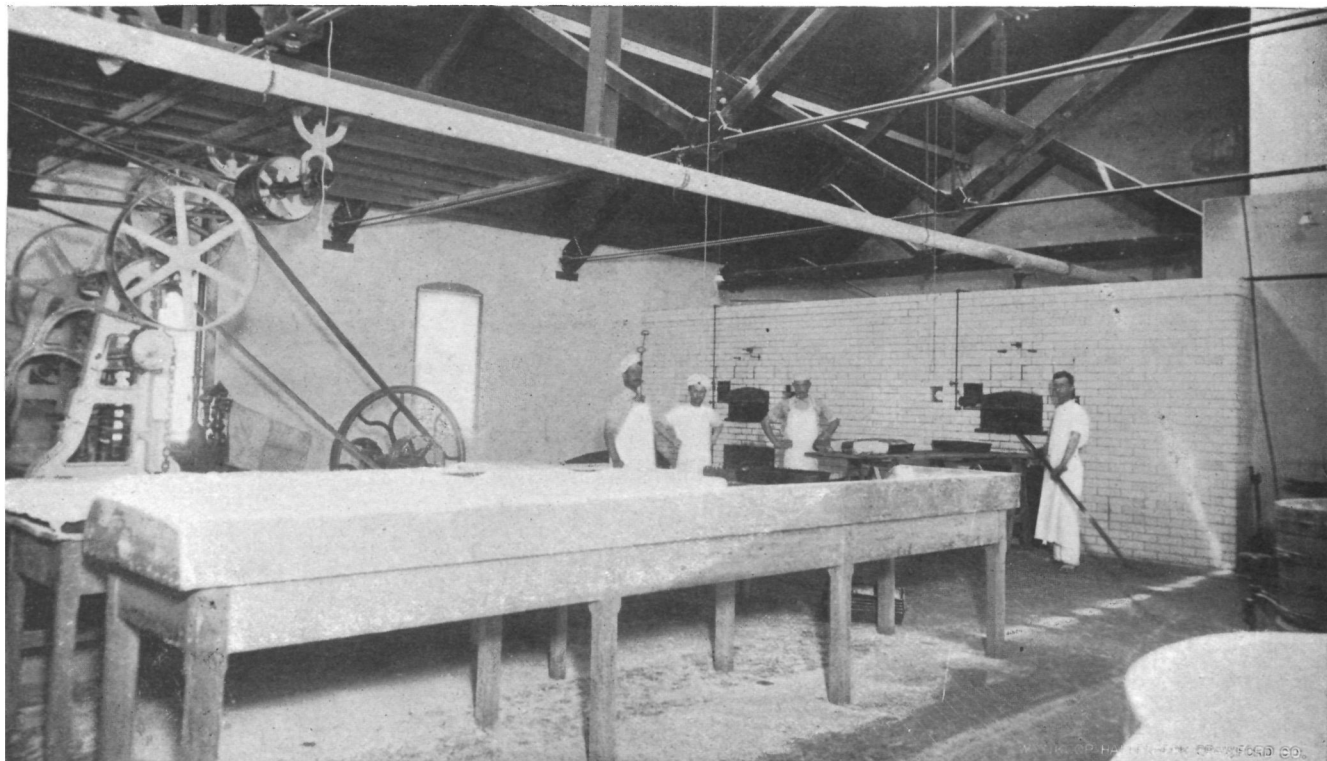
WILLARD STATE HOSPITAL.—INTERIOR OF BRUSH, BROOM AND BASKET MAKING ROOM.



WILLARD STATE HOSPITAL.—BASKET, MAT AND BRUSH SHOP.



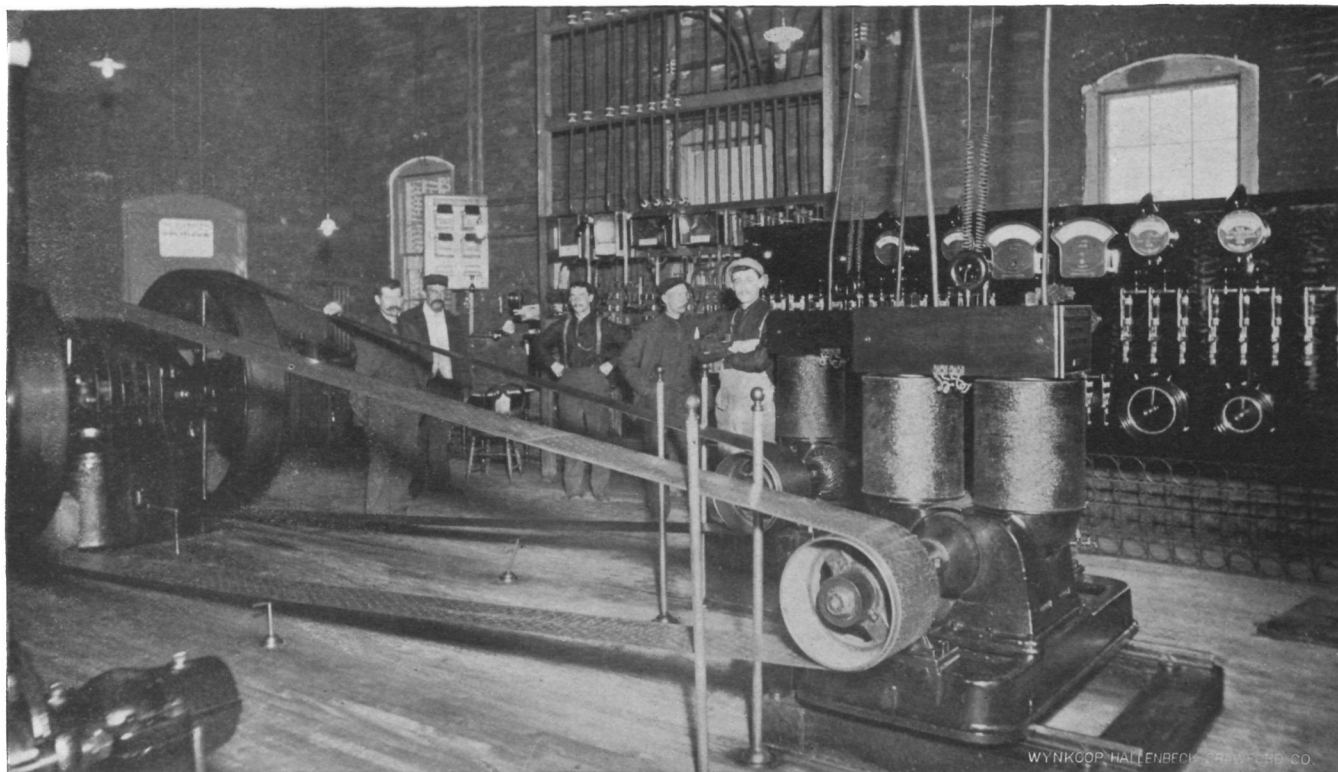
WILLARD STATE HOSPITAL.—LAUNDRY.



WILLARD STATE HOSPITAL.—INTERIOR OF BAKERY.



WILLARD STATE HOSPITAL.—STOREROOM.



WILLARD STATE HOSPITAL.—ELECTRIC LIGHT PLANT.

WILLARD STATE HOSPITAL

49

Turkeys	14
Geese	7
Ducks	44
Chickens	275

ARTICLES MADE IN THE MATRON'S DEPARTMENT

Aprons, patients'	3,846
Aprons, cooks'	909
Awnings	4
Bibs	258
Bath robes, blanket	4
Blankets, quilted	52
Burial sheets	78
Bureau covers	346
Caps, cooks'	199
Caps, nurses'	233
Chemises	984
Curtains, holland	733
Curtains, cheese cloth	42
Cotton mats	29
Dresses, calico	1,119
Dresses, gingham	1,741
Dresses, strong gingham	313
Dresses, strong gingham, quilted	53
Dresses, worsted	9
Drawers, cotton	22
Drawers, cotton flannel	235
Hose, knit	184
Hose bags	141
Laundry bags	92
Laundry squares	35
Mattress ticks	217
Night gowns	280
Neckties	183
Pillow cases	2,230

Pillow ticks	107
Pillow shams	85
Pillow cases, burial.....	27
Shirt waists	7
Skirts, balmoral	90
Skirts, cotton	194
Skirts, cotton flannel.....	596
Shirts	2,524
Shrouds	131
Shroud drawers	167
Shroud shirts	31
Shroud chemises	90
Sheets	3,364
Table cloths, patients'.....	449
Table cloths, center.....	28
Table napkins	180
Tray cloths	108
Table spreads	92
Towels, patients'	9,046
Towels, dish	1,637
Union suits	19
Waists, cotton flannel.....	415

ARTICLES MADE IN THE TAILORING DEPARTMENT

Caps, men's winter.....	95
Coats	957
Coats, blue uniform.....	48
Coats, uniform duck.....	27
Coats, dining-room	215
Coats, kitchen	144
Hat bands	480
Mittens, cloth	116
Overcoats	91
Overshirts	205
Overalls, pairs	836

Pants, pairs	2,636
Pants, dining-room, pairs.....	215
Pants, kitchen, pairs.....	161
Pants, blue uniform, pairs.....	60
Straight suits	147
Suspenders, canvas	378
Vests ..	976
Vests, blue uniform	48

ARTICLES MADE AND REPAIRED IN THE SHOE SHOP

Awnings for windows.....	6
Chairs upholstered	13
Couches upholstered	25
Cushions for chairs.....	12
Hame straps	40
Hitching straps	15
Halters, horse	6
Horse collars, faced new.....	20
Horse bridles, new pairs.....	2
Horse fly-nets repaired.....	22
Harness straps, new.....	110
Lines, double, pairs.....	3
Laundry bags, new.....	92
Laundry repaired	175
Martingales, pairs	10
Mattresses made over, patients'.....	1,400
Mattresses made over, employees'.....	150
Mattresses made, new, employees'.....	20
Pillows made over.....	1,600
Rag carpet, yards.....	700 $\frac{3}{4}$
Rugs made	16
Straps, breast, pairs.....	12
Tetes upholstered	2

All boots, shoes and slippers repaired.

All coarse and fine harness repaired.

ARTICLES MADE IN THE TIN SHOP

Ash pans, galvanized iron.....	4
Basins, 3-pint, tin.....	24
Basins, 2-quart, tin.....	48
Boxes, covered, for bird seed.....	6
Boxes, covered voucher.....	1
Boxes, cake	5
Cans, milk, 15-gallon.....	1
Cans, syrup, 3-gallon.....	1
Cans, garbage, galvanized iron.....	4
Cookers, steam, tin.....	1
Chambers, copper bottom, tin.....	18
Clothes hangers, wire.....	950
Dippers, tin, 1-quart.....	36
Dippers, 2-quart	12
Dippers, 8-quart	2
Dippers with strainer.....	3
Exhaust heads, galvanized iron.....	2
Food boxes, covered.....	18
Feed room lining, galvanized iron, — square feet.....	1,032
Galvanized tank, hot-well for yacht.....	1
Galvanized iron finales for silos.....	2
Gutters and valleys, steward's house, feet.....	222
Holdes, spit cup.....	7
Hood and pipe for kettles at piggeries, galvanized iron	1
Inhalers, tin	6
Kettles, farina	2
Milk coolers, hoop on bottom.....	6
Pails, tin, 10-quart.....	2
Pails, 12-quart	88
Pails, 12-quart, galvanized iron.....	98
Pails, coal, galvanized iron.....	18
Pans, tin, 6-quart.....	68
Pans, 10-quart	72
Pans, 21-quart	72

Pans, 10-gallon	4
Pans, 20-gallon	3
Pans, dust	72
Pans, dripping, R. G. iron.....	14
Pans, steam pudding, covered.....	6
Potato steamers	6
Pop-over moulds, tin.....	60
Pails, special sick diet, 2-quart, tin.....	6
Refrigerator linings	2
Roofing, tin, square feet.....	600
Roof flashings for pipe.....	5
Repairing tank of railroad engine.....	1
Sprinkler heads	24
Shingles, tin, for repairing roofs.....	5,913
Strainers, milk, tin.....	1
Skimmers, tin	6
Slop pails	6
Tins, Boston brown bread.....	6
Tins, cake	4
Valley tin, feet.....	20
Vegetable spoons, handles, iron.....	12
Wash dishes, copper bottom.....	72
Cups, tin	144
Funnels, tin, 5-inch.....	12

ARTICLES MADE IN THE BROOM AND BASKET SHOP

Baskets repaired	39
Bushel baskets	11
Baskets, $\frac{1}{2}$ -bushel	48
Brushes, bathing	58
Brushes, cattle	29
Brushes, horse	8
Brushes, hair	245
Brushes, nail	27
Brushes, scrubbing	628
Brushes, shoe	24

Brushes, wall	11
Brooms, house	2,885
Brooms, stable	42
Brooms, whisk	141
Baskets, small square.....	8
Baskets, egg	2
Chairs, cane	179
Clothes hampers	9
Clothes baskets, square.....	11
Door mats	51
Floor polishers	246
Magazine stands	2
Sock bags	34
Waste baskets	51

MAINTENANCE

	Total cost	Weekly per capita
Officers' salaries	\$18,567 17	\$0.158
Wages	125,966 66	1.068
Provisions and stores.....	111,433 84	.944
Ordinary repairs	9,320 94	.071
Farm and grounds.....	10,652 73	.091
Clothing	15,095 34	.128
Furniture and bedding.....	7,760 23	.066
Books and stationery.....	2,384 22	.022
Fuel and light.....	30,212 68	.257
Medical supplies	3,759 70	.032
Miscellaneous expenses	10,334 87	.088
Transportation of patients.....	4,692 44	.041
Total estimates 1-12 inclusive.....	\$350,180 82	\$2.966
Clothing manufacturing department....	15,711 87	.133

The following amounts were expended under special fund estimate (chapter 570, Laws of 1899) from October 1, 1899, to September 30, 1900:

Repairs to roofs.....	\$395 63
Silos	599 86

Repairs to laundry floor.....	\$122 60
Shade trees and horticultural supplies.....	195 41
Meddick and Van Vleet houses.....	92 80
Sand dock	168 03
Rebuilding manhole	40 00
Extension of water supply.....	38 62
Repairs to outside buildings.....	39 90
Painting main building.....	54 65
Total	<u>\$1,747 50</u>

The following amounts were expended under special fund estimates (chapter 364, Laws of 1900) from October 1, 1899, to September 30, 1900:

Sand dock	\$263 54
Repairs to Meddick and Van Vleet houses.....	159 96
Changes in water supply.....	882 97
Rebuilding locomotive house.....	1,093 22
Screens for laboratory and shops.....	113 00
Repairs to employees' home.....	452 68
New gutters on store and rear east buildings.....	242 04
Additional laundry machinery.....	1,197 20
Steam carving tables.....	221 95
Addition to Hillside for boots, clothing and bath rooms	625 90
Cement walk, main building to railroad station....	536 20
Painting outside buildings.....	868 80
Food car, trainway to kitchen.....	60 00
Reshingling grain barn at Hillside.....	80 00
Spray baths at branch and infirmary.....	31 80
Farm fence	244 40
Steam heating plant at hotel.....	72 95
Switches to locomotive house and scales.....	32 90
Total	<u>\$7,179 51</u>

STATISTICAL TABLES

TABLE No. 1

Showing Movement of Population for the Year Ending September 30,
1900

	Men	Women	Total
Remaining October 1, 1899.....	1,101	1,152	2,253
Admitted during year ending Sept. 30, 1900.	145	124	269
On original commitments:			
From residences.....	124	116	240
By transfers from county houses.....	14	4	18
By transfers from other institutions for insane	7	4	11
Total number under treatment during year	1,246	1,276	2,522
Daily average population.....	1,115	1,155	2,270
Capacity of institution.....	1,136	1,169	2,305
Discharged during the year:			
As recovered	23	27	50
As improved	25	24	49
As unimproved	7	7	14
As not insane	5	.....	5
Died	64	74	138
Whole number discharged during the year..	124	132	256
Remaining October 1, 1900.....	1,122	1,144	2,266

TABLE No. 2

October 1, 1899, to September 30, 1900

Date of opening.....	1869
Total acreage of grounds and buildings.....	1,107
Value of real estate, including buildings.....	\$1,396,243 52
Value of personal property.....	211,353 51
Acreage under cultivation.....	750

Receipts during year, maintenance fund:

Balance on hand October 1, 1899.....	\$496 91
From State Treasury for maintenance on estimates 1 to 12 inclusive.....	356,214 15
From private patients.....	599 83
From reimbursing patients.....	20,047 91
From all other sources.....	2,327 29

Total receipts for maintenance.....	\$379,686 09
-------------------------------------	--------------

Total receipts from State commissioner in Lunacy

for extraordinary improvements....	\$8,050 10
Total receipts from manufacturing fund.....	10,852 16

Disbursements during year for maintenance:

Estimate No. 1. For officers' salaries.....	\$18,567 17
Estimate No. 2. For wages.....	125,966 66
Estimate No. 3. For provisions and stores.....	111,433 84
Estimate No. 4. For ordinary repairs.....	9,320 94
Estimate No. 5. For farm and grounds.....	10,652 73
Estimate No. 6. For clothing.....	15,095 34
Estimate No. 7. For furniture and bedding.....	7,760 23
Estimate No. 8. For books and stationery.....	2,384 22
Estimate No. 9. For fuel and light.....	30,212 68
Estimate No. 10. For medical supplies.....	3,759 70
Estimate No. 11. For miscellaneous expenses..	10,334 87
Estimate No. 12. For transportation.....	4,692 44

Total disbursements, estimates 1 to 12 inclusive..	\$350,180 82
--	--------------

Table No. 2—(Concluded)

Total disbursements during year for extraordinary improvements under apportionment by State Commission in Lunacy.....	\$8,050 10
Total disbursements during year, manufacturing fund.....	15,711 87
To State Treasurer sundry receipts.....	22,542 26
<hr/>	
Balances October 1, 1900:	
General maintenance fund.....	\$442 21
Apportionments by State Commission in Lunacy for extraordinary improvements.....	None.
Manufacturing fund.....	\$1,661 09
<hr/>	
Weekly per capita cost on daily average number of patients, estimates 1 to 12 inclusive.....	\$2,966 00
<hr/>	
Maximum rate of wages paid attendants:	
Men.....	\$33 00
Women.....	28 00
<hr/>	
Minimum rate of wages paid attendants:	
Men.....	\$20 00
Women.....	14 00
<hr/>	
Proportion of day attendants to average daily population.....	1 to 17.73
Proportion of night attendants to average daily population.....	1 to 81.07
Percentage of daily patient population engaged in some kind of useful occupation.....	51.69
<hr/>	
Estimated value of farm and garden products during year.....	\$33,390 76
Estimated value of articles made or manufactured by patients during year.....	18,902 91
<hr/>	

TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

CAUSES	YEAR ENDING SEPTEMBER 30, 1900			INHERITED PREDISPOSITION			Unascertained
	Men	Women	Total	Men	Women	Total	
Moral:							
Adverse conditions (such as loss of friends, business troubles, etc.)...	2	13	15	1	5	6	....
Mental strain, worry and overwork (not included in above)	8	12	20	1	3	4	....
Religious excitement...	2	7	9	1	3	4	1
Love affairs (including seduction.) .....	....	1	1	....	....	....	....
Fright and nervous shock	1	1	2	....	....	....	....
Physical:							
Intemperance.....	22	4	26	4	2	6	7
Sexual excess	3	....	3	2	....	2	....
Venereal diseases	3	....	3	....	....	....	....
Masturbation.....	4	1	5	....	....	....	1
Sunstroke	2	2	4	....	....	....	1
Accident or injury.....	2	4	6	1	1	2	....
Pregnancy .....	....	1	1	....	....	....	....
Parturition and puerperium .....	....	3	3	....	....	....	....
Lactation .....	....	1	1	....	....	....	....
Change of life.....	....	18	18	....	6	6	....
Privation and overwork	1	4	5	....	3	3	....
Epilepsy	5	6	11	....	....	....	3
Diseases of skull and brain	2	2	4	....	1	1	1
Old age	14	2	16	4	....	4	7
Epidemic influenza.....	2	5	7	1	2	3	....
Abuse of drugs.....	1	1	2	....	....	....	1
All other bodily disorders and ill health ...	11	10	21	2	4	6	2
Heredity	24	17	41	24	17	41	....
Congenital defect.....	2	2	4	....	....	....	....
Unascertained	29	7	36	5	....	5	15
Not insane.....	5	....	5	1	....	1	2
Total	145	124	269	47	47	94	41

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1900, and since October 1, 1888

FORM	YEAR ENDING SEPTEMBER 30, 1900			SINCE OCTOBER 1, 1888		
	Admitted	Recovered	Died	Admitted	Recovered	Died
Mania, acute delirious...	1	....	.....	3	.....	2
Mania, acute.....	29	17	2	524	229	66
Mania, recurrent.....	3	....	1	69	24	13
Mania, chronic.....	19	....	17	522	23	266
Melancholia, acute.....	59	32	9	784	275	157
Melancholia, chronic....	81	1	17	537	31	128
Alternating (circular) in- sanity .....	.....	.....	.....	3	.....	.....
General paralysis.....	17	....	19	147	.....	123
Dementia, primary	3	....	.....	7	.....	.....
Dementia, terminal.....	42	....	62	1,628	.....	897
Epilepsy with insanity ..	7	....	9	133	.....	156
Imbecility with maniacal attacks	3	....	2	99	.....	18
Idiocy .....	.....	.....	.....	37	.....	15
Not insane *.....	5	....	.....	18	.....	.....
Total.....	269	50	138	4,561	582	1,841

* Includes cases of alcoholism, drug habits, etc.

TABLE No. 5

Showing results of treatment in presumably curable cases for the current year

CURABLE CONDITIONS		PRESENT AT BEGINNING OF YEAR			ADMITTED DURING YEAR			UNDER TREATMENT DURING YEAR		
		Men	Women	Total	Men	Women	Total	Men	Women	Total
Melancholia in acute forms.	First admission.....	18	8	26	8	25	33	26	33	59
	Second admission.....		2	2	2	1	3	2	3	5
	Third admission.....		1	1	.....	.....	.....	.....	1	1
Mania in acute forms.	First admission.....	2	7	9	7	8	15	9	15	24
	Second admission.....		2	2	1	2	3	1	4	5
	Third admission.....		2	2	.....	.....	.....	.....	2	2
All other cur- able forms.	First admission.....		3	3	.....	3	3	.....	6	6
	Second admission.....		.....	.....	.....	.....	.....	.....	.....	.....
	Third admission.....		.....	.....	.....	2	2	.....	2	2

Table No. 5—(Concluded)

CURABLE CONDITIONS		DISCHARGED RECOVERED DURING YEAR			AVERAGE LENGTH OF TREATMENT OF RECOVERED CASES (LAST ATTACK)				DIED DURING YEAR			TRANSFERRED TO OTHER GROUPS			REMAINING AT CLOSE OF FISCAL YEAR		
		Men	Women	Total	MEN		WOMEN		Men	Women	Total	Men	Women	Total	Men	Women	Total
					Years	Months	Years	Months									
Melancholia in acute forms.	First admission...	13	17	30	....	5½	....	6¼	....	1	1	9	3	12	4	12	16
	Second admission..	1	1	2	....	10	....	3¾	....	....	....	....	1	1	1	1	2
	Third admission...	....	1	1	....	....	....	6½	....	....	....	....	....	....	....	....	....
Mania in acute forms.	First admission...	8	6	14	..	5½	....	9¾	....	....	....	1	4	5	....	5	5
	Second admission..	1	....	1	....	9½	....	....	....	....	....	....	1	1	....	3	3
	Third admission...	....	1	1	....	....	....	3½	....	....	....	....	1	1	....	....	....
All other curable forms.	First admission...	....	1	1	....	....	....	1½	....	....	....	....	3	3	....	2	2
	Second admission..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Third admission...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	2

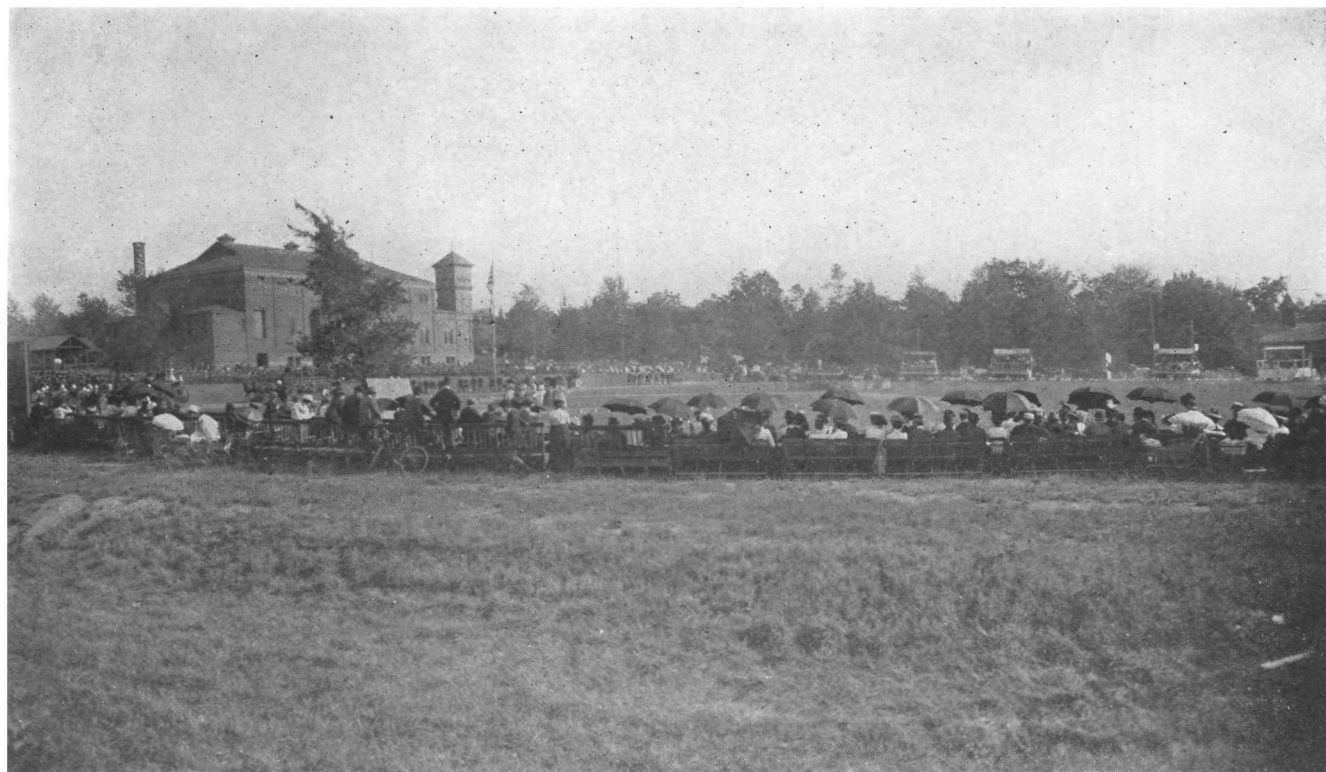
TABLE No. 6

Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1900						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month.....	10	8	18	....	1	1	108	86	194	2	1	3
One to three months.....	5	10	15	5	3	8	65	79	144	48	19	67
Three to six months.....	4	3	7	11	12	23	45	49	94	106	81	187
Six to nine months.....	1	4	5	2	4	6	15	16	31	47	58	105
Nine months to one year.....	.....	.....	.....	4	3	7	7	11	18	34	47	81
One year to eighteen months ..	.....	.....	.....	1	3	4	13	7	20	37	36	73
Eighteen months to two years ..	1	1	2	.....	.....	.....	10	9	19	7	11	18
Two to three years.....	.....	.....	.....	.....	1	1	11	8	19	10	19	29
Three to four years.....	.....	.....	.....	.....	.....	.....	3	2	5	2	6	8
Four to five years.....	.....	.....	.....	.....	.....	.....	.....	3	3	3	1	4
Five to ten years.....	.....	.....	.....	.....	.....	.....	4	6	10	3	3	6
Ten to twenty years.....	.....	.....	.....	.....	.....	.....	2	2	4	.....	1	1
Unascertained.....	2	1	3	.....	.....	.....	16	5	21	.....	.....	.....
Total.....	23	27	50	23	27	50	299	283	582	299	283	582



WILLARD STATE HOSPITAL.—PARADE OF WORKING PATIENTS ON FIELD DAY.



WILLARD STATE HOSPITAL.—FIELD DAY.

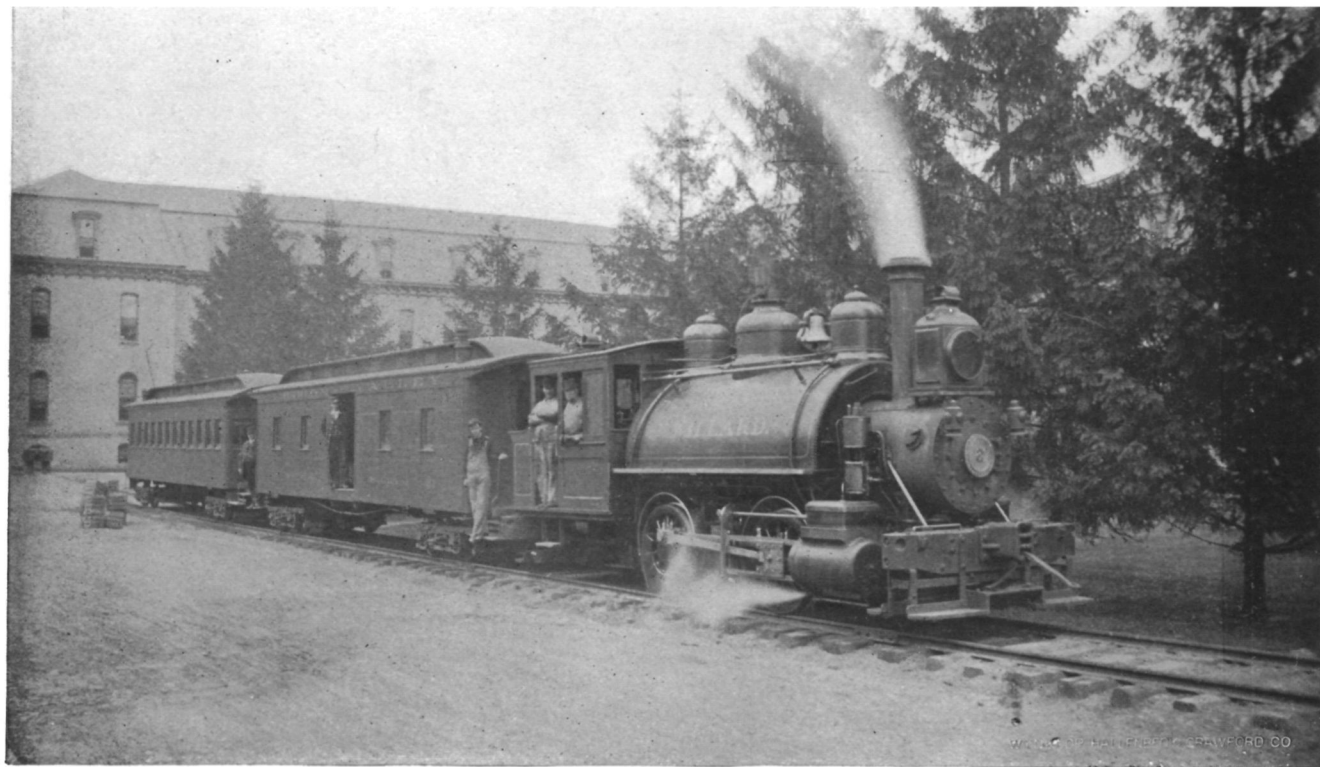


WILLARD STATE HOSPITAL.—HARVESTING.



WYNKOOP HALLENBECK CRAWFORD CO.

WILLARD STATE HOSPITAL.—FALL PLOWING.



WILLARD STATE HOSPITAL.—WILLARD BRANCH TRAIN STARTING FROM THE BUILDING.

TABLE No. 7

Showing the causes of death of patients who died during the current year and since October 1, 1888

CAUSE OF DEATH.	YEAR ENDING SEP- TEMBER 30, 1900			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Specific infectious diseases :						
Typhoid fever.....				3	5	8
Influenza				1	5	6
Erysipelas				4	9	13
Septicemia and pyemia		1	1	8	5	13
Dysentery		1	1	9	11	20
Tuberculosis	8	12	20	152	231	383
Constitutional diseases :						
Rheumatism (or rheumatic af- fections)		1	1	....	1	1
Diabetes mellitus and diabetes insipidus				1	1	2
Scurvy, purpura and hæmophilia .....				....	1	1
Diseases of the digestive system :						
Mouth, salivary glands, pharynx, tonsils and œsophagus				3	....	3
Diseases of the stomach				2	3	5
Diseases of the intestines	1	6	7	39	59	98
Diseases of the liver				3	2	5
Diseases of the peritoneum	1	1	2	11	9	20
Diseases of the respiratory system :						
Diseases of the bronchi				5	1	6
Diseases of the lungs	10	15	25	132	132	264
Diseases of the pleura				2	2	4
Diseases of the circulatory system :						
Diseases of the pericardium				2	2	4
Diseases of the heart	12	13	25	110	108	218
Aneurism	1	....	1	2	1	3
Diseases of the blood and ductless glands :						
Anemia, pernicious anemia and leukemia	1	1	2	1	4	5
Diseases of the genito-urinary system	6	12	18	76	51	127
Diseases of the nervous system :						
Diseases of the spinal cord				4	....	4
Diseases of the meninges		1	1	5	6	11

Table No. 7—(Concluded)

CAUSE OF DEATH	YEAR ENDING SEPTEMBER 30, 1990			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Diseases of the nervous system— <i>Continued:</i>						
Organic diseases of the brain (tumor, abscess, embolism, thrombosis, hemorrhage and other gross lesions)	4	5	9	56	86	142
Epilepsy	2	.....	2	45	37	82
Mental diseases:						
Exhaustion of acute mental disease . . . . .	.....	.....	.....	66	71	137
Exhaustion of chronic mental disease . . . . .	.....	.....	.....	.....	.....	.....
General paralysis of the insane.	16	1	17	100	20	120
The intoxications; heat-stroke; obesity:						
Heat stroke . . . . .	.....	.....	.....	.....	1	1
Debility of old age . . . . .	.....	.....	.....	26	43	69
Accident . . . . .	.....	.....	.....	7	3	10
Suicide . . . . .	.....	.....	.....	4	2	6
Surgical and gynecological diseases and diseases of the skin	1	.....	1	6	4	10
Malignant new growths or cancer.	1	4	5	11	29	40
Total	64	74	138	896	945	1,841

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1900			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Paternal branch.....	7	9	16	144	169	313
Maternal branch.....	10	17	27	199	243	442
Paternal and maternal branches.....	1	7	8	20	45	65
Collateral branches...	26	14	40	246	241	487
No hereditary ten- dency.....	58	72	130	809	675	1,484
Unascertained.....	43	5	48	863	907	1,770
Total.....	145	124	269	2,281	2,280	4,561

TABLE No. 9

Showing civil condition of patients admitted during the current year and since October 1, 1888

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1900			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Single.....	69	38	107	1,152	865	2,017
Married.....	50	59	109	849	965	1,814
Widowed.....	21	25	46	220	406	626
Divorced.....	.....	2	2	23	14	37
Unascertained.....	5	.....	5	37	30	67
Total.....	145	124	269	2,281	2,280	4,561

TABLE No. 10

Showing degree of education of patients admitted during the current year and since October 1, 1888

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1900			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Collegiate	7	.....	7	39	11	50
Academic	4	14	18	134	137	271
Common school	104	101	205	1,382	1,319	2,701
Read and write	2	4	6	80	40	120
Read only	4	2	6	104	139	243
No education	7	2	9	160	148	308
Unascertained	17	1	18	382	486	868
Total	145	124	269	2,281	2,280	4,561

TABLE No. 11

Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1900						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month.....	5	1	6	4	4	8	53	45	98	71	47	118
One to three months.....	3	6	9	7	1	8	49	50	99	93	75	168
Three to six months.....	6	3	9	4	1	5	52	33	85	77	70	147
Six to nine months.....	3	5	8	3	2	5	54	36	90	43	54	97
Nine months to one year.....	1	3	4	5	4	9	23	24	47	48	41	89
One year to eighteen months....	7	7	14	4	5	9	58	45	103	73	67	140
Eighteen months to two years...	2	.....	2	2	2	4	22	22	44	49	51	100
Two to three years.....	5	7	12	5	6	11	92	76	168	68	64	132
Three to four years.....	3	2	5	2	7	9	54	67	121	72	70	142
Four to six years.....	3	2	5	8	16	24	67	76	143	66	73	139
Six to ten years.....	6	6	12	7	3	10	72	94	166	77	81	158
Ten to twenty years.....	4	9	13	6	14	20	82	113	195	116	171	287
Twenty years and over.....	6	9	15	7	9	16	47	67	114	43	81	124
Unascertained ..	10	14	24	.....	.....	...	171	197	368	.....	.....	.....
Total.....	64	74	138	64	74	138	896	945	1,841	896	945	1,841
Average duration of insane life (giving years and tenths).....				6.2	7.9	7.1				5.3	6.6	5.8

TABLE No. 12

Showing ages of those admitted during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1900			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 5 to 10 years		1	1		1	1
From 10 to 15 years	1		1	10	4	14
From 15 to 20 years	6	3	9	75	42	117
From 20 to 25 years	11	6	17	175	115	290
From 25 to 30 years	12	15	27	197	182	379
From 30 to 35 years	14	17	31	221	223	444
From 35 to 40 years	12	10	22	252	243	495
From 40 to 50 years	28	25	53	458	553	1,011
From 50 to 60 years	29	16	45	405	424	829
From 60 to 70 years	17	19	36	259	283	542
From 70 to 80 years	11	11	22	180	172	352
From 80 to 90 years	4	1	5	47	37	84
Over 90 years				2	1	3
Total	145	124	269	2,281	2,280	4,561

TABLE No. 13

Showing ages of those discharged recovered during the current year
and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1900			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 5 to 10 years		1	1		1	1
From 10 to 20 years	3	2	5	22	18	40
From 20 to 30 years	3	8	11	80	83	163
From 30 to 40 years	5	9	14	63	85	148
From 40 to 50 years	5	3	8	64	55	119
From 50 to 60 years	7	1	8	51	29	80
From 60 to 70 years		3	3	16	9	25
From 70 to 80 years				3	3	6
Total	23	27	50	299	283	582

TABLE No. 14

Showing ages of patients who died during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1900			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 15 years ..						
From 15 to 20 years ..				4	1	5
From 20 to 25 years ..	1		1	20	13	33
From 25 to 30 years ..		2	2	36	30	66
From 30 to 35 years ..	2	3	5	45	44	89
From 35 to 40 years ..	3	4	7	75	54	129
From 40 to 50 years ..	13	9	22	146	178	324
From 50 to 60 years ..	16	19	35	183	204	387
From 60 to 70 years ..	9	15	24	160	191	351
From 70 to 80 years ..	14	12	26	169	169	338
From 80 to 90 years ..	5	7	12	56	55	111
Over 90 years	1	3	4	2	6	8
Total	64	74	138	896	945	1,841

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients admitted during the year ending September 30, 1900

DURATION OF INSANITY	Men	Women	Total
Under one month	22	22	44
One to three months	20	25	45
Three to six months	10	9	19
Six to nine months	19	14	33
Nine months to one year	1	5	6
One year to eighteen months	9	5	14
Eighteen months to two years	2	1	3
Two to three years	9	5	14
Three to four years	6	7	13
Four to five years	5	4	9
Five to ten years	10	11	21
Ten to fifteen years	2	2	4
Fifteen to twenty years	3	2	5
Twenty to thirty years	1	2	3
Thirty years and upwards .....	.....	4	4
Not insane*	2	.....	2
Unascertained	24	6	30
Total	145	124	269

*Includes cases of alcoholism, morphia habit, etc.

TABLE No. 16

Showing period of residence in asylum of patients remaining under treatment September 30, 1900

PERIOD OF RESIDENCE	Men	Women	Total
Under one month	11	12	23
One to three months	12	17	29
Three to six months	38	27	65
Six to nine months	26	25	51
Nine months to one year	21	19	40
One year to eighteen months	26	23	49
Eighteen months to two years	32	57	89
Two to three years	175	150	325
Three to four years	69	67	136
Four to five years	112	155	267
Five to ten years	274	239	513
Ten to fifteen years	105	105	210
Fifteen to twenty years	75	104	179
Twenty to thirty years	138	133	271
Thirty years and upwards	8	11	19
Total	1,122	1,144	2,266

TABLE No. 17

Showing the occupation of those admitted during the current year and since October 1, 1888

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1900			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Professional: Clergy, military and naval officers, physicians, law- yers, architects, artists, authors, civil engineers, surveyors, etc.	6	1	7	64	7	71

Table No. 17—(Concluded).

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1900			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Commercial :						
Bankers, merchants, accountants, clerks, salesmen, shopkeepers, shopmen, stenographers, typewriters, etc.....	9	.....	9	193	4	197
Agricultural and pastoral :						
Farmers, gardeners, herdsmen, etc.....	37	.....	37	626	2	628
Mechanics at out-door vocations :						
Blacksmiths, carpenters, enginefitters, sawyers, painters, police, etc.....	21	.....	21	376	.....	376
Mechanics etc., at sedentary vocations :						
Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc.....	13	1	14	144	1	145
Domestic service :						
Waiters, cooks, servants, etc.....	.....	15	15	24	1,142	1,166
Educational and higher domestic duties :						
Governesses, teachers, students, housekeepers, nurses, etc.....	1	95	96	43	814	857
Commercial :						
Shopkeepers, saleswomen, stenographers, typewriters, etc.....	.....	.....	.....	.....	10	10
Employed in sedentary occupation :						
Tailoresses, seamstresses, bookbinders, factory workers, etc.....	.....	6	6	11	108	119
Miners, seamen, etc.....	.....	.....	.....	26	.....	26
Prostitutes .....	.....	.....	.....	.....	1	1
Laborers	42	.....	42	603	.....	603
No occupation	14	6	20	134	142	276
Unascertained	2	.....	2	37	49	86
Total	145	124	269	2,281	2,280	4,561

TABLE No. 18

Showing the nativity of patients admitted during the current year and since October 1, 1888

NATIVITY	YEAR ENDING SEPTEMBER 30, 1900			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
California	1	1	2	2	1	3
Connecticut				14	8	22
Florida					2	2
Georgia					1	1
Illinois				5	2	7
Indiana				1	4	5
Iowa	1		1	2		2
Kansas					2	2
Kentucky					3	3
Maine				2	2	4
Maryland				5	56	61
Massachusetts				16	8	24
Michigan	3	2	5	13	7	20
Minnesota				1	3	4
Mississippi				1		1
Missouri				1	1	2
New Hampshire				3	2	5
New Jersey	1	1	2	10	8	18
New York	64	83	147	1,274	1,202	2,476
North Carolina				2	2	4
Ohio				4	1	5
Pennsylvania	3	7	10	56	43	99
Rhode Island				2		2
South Carolina				1	1	2
Tennessee				1		1
Texas				1		1
Vermont	2		2	11	6	17
Virginia	1		1	2	4	6
Wisconsin		1	1	2	6	8
Africa				1		1
Armenia				1		1
Austria				5	3	8
Bavaria				1		1
Bohemia				1	2	3
Canada	1		1	28	33	61
Denmark				1	3	4
England	3	5	8	70	72	142
France				15	5	20

Table No. 18—(Concluded)

NATIVITY	YEAR ENDING SEPTEMBER 30, 1900			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Germany	4	4	8	167	178	345
Greece					1	1
Holland		2	2	3	9	12
Hungary.....				4	3	7
Ireland	9	9	18	241	403	644
Italy	2		2	16	7	23
Malta				1		1
Norway				1		1
Poland				6	14	20
Russia				7	1	8
Scotland				10	13	23
Sicily				1		1
Sweden	1		1	9	7	16
Switzerland	1		1	11	1	12
Wales		1	1		2	2
United States.....	47	7	54	69	11	80
Nova Scotia.....				1		1
Unascertained	1	1	2	179	137	316
Total	145	124	269	2,281	2,280	4,561

Of the total number admitted since the 1st of October, 1890, the parents of 44 per cent were both of foreign birth.

In 3 per cent the parentage on the paternal side was foreign, while that on the maternal side was native.

In 6 per cent the parentage on the maternal side was foreign, while on the paternal side was native.

The records in this hospital prior to 1890 do not show the statistics required.

TABLE No. 19

Showing the residence by counties and classification of patients admitted during the year ending September 30, 1900

COUNTIES	Public	Private	Total
Albany			
Allegany	28		28
Broome			
Cattaraugus			
Cayuga	37		37
Chautauqua			
Chemung			
Chenango			
Clinton			
Columbia			
Cortland			
Delaware			
Dutchess			
Erie			
Essex			
Franklin			
Fulton			
Genesee	13		13
Greene			
Hamilton			
Herkimer			
Jefferson			
Kings			
Lewis			
Livingston			
Madison			
Monroe			
Montgomery			
New York			
Niagara			
Oneida			
Onondaga			
Ontario	31		31
Orange			
Orleans	9		9
Oswego			
Otsego			
Putnam			
Queens			
Rensselaer			
Richmond			

Table No. 19—(Concluded)

COUNTIES	Public	Private	Total
Rockland .....	.....	.....	.....
St. Lawrence .....	.....	.....	.....
Saratoga .....	.....	.....	.....
Schenectady .....	.....	.....	.....
Schoharie .....	.....	.....	.....
Schuyler	5	.....	5
Seneca	12	.....	12
Steuben	62	.....	62
Suffolk .....	.....	.....	.....
Sullivan .....	.....	.....	.....
Tioga .....	.....	.....	.....
Tompkins	19	.....	19
Ulster .....	.....	.....	.....
Warren .....	.....	.....	.....
Washington .....	.....	.....	.....
Wayne	34	.....	34
Westchester .....	.....	.....	.....
Wyoming .....	.....	.....	.....
Yates	10	.....	10
Soldiers' Home	9	.....	9
Total	269	.....	269

TABLE No. 20

Showing the residence by counties and classification of patients
remaining under treatment September 30, 1900

COUNTIES	PUBLIC		
	Men	Women	Total
Albany	62	94	156
Allegany	41	42	83
Broome			
Cattaraugus	1		1
Cayuga	107	81	188
Chautauqua	2	3	5
Chemung	39	33	72
Chenango			
Clinton		2	2
Columbia		10	10
Cortland			
Delaware			
Dutchess		1	1
Erie	33	7	40
Essex	2	4	6
Franklin	10	5	15
Fulton	12	5	17
Genesee	31	22	53
Greene	3	1	4
Hamilton	1		1
Herkimer	6	7	13
Jefferson			
Kings		2	2
Lewis	5	1	6
Livingston	18	22	40
Madison	3	2	5
Monroe	19	48	67
Montgomery	11	9	20
New York	120	110	230
Niagara	9	4	13
Oneida	1	1	2
Onondaga	26	28	54
Ontario	94	85	179
Orange	7	2	9
Orleans	22	15	37
Oswego	2	5	7
Otsego			
Putnam	1	3	4
Queens	15	19	34
Rensselaer	13	61	74

Table No. 20—(Concluded)

COUNTIES	PUBLIC		
	Men	Women	Total
Richmond.....		7	7
Rockland	1	.....	1
St. Lawrence .....		.....	.....
Saratoga	11	12	23
Schenectady	9	13	22
Schoharie .....		.....	.....
Schuyler	30	26	56
Seneca	48	45	93
Steuben	113	89	202
Suffolk	6	2	8
Sullivan.....	1	.....	1
Tioga.....		.....	.....
Tompkins	46	49	95
Ulster	1	17	18
Warren	1	4	5
Washington		12	12
Wayne.....	55	50	105
Westchester	13	48	61
Wyoming	2	.....	2
Yates.....	22	34	56
Soldiers and Sailors' Home	29	.....	29
State patients.....	18	2	20
Total	1,122	1,144	2,266

THIRTY-THIRD ANNUAL REPORT

OF THE

BOARD OF MANAGERS

OF THE

WILLARD STATE HOSPITAL

TO THE

STATE COMMISSION IN LUNACY

FOR THE YEAR 1901

TRANSMITTED TO THE STATE COMMISSION IN LUNACY

ALBANY

J. B. LYON COMPANY, STATE PRINTERS

1902

Dr. Macy's

COMPLIMENTS.

THIRTY-THIRD ANNUAL REPORT

OF THE

BOARD OF MANAGERS

OF THE

WILLARD STATE HOSPITAL

TO THE

State Commission in Lunacy

FOR THE YEAR 1901

**OFFICERS OF THE HOSPITAL
MANAGERS**

HON. S. S. HAMMOND.....Geneva
WILLIAM J. POLLARD.....Seneca Falls
JOHN H. OSBORNE.....Auburn
PROF. J. L. MORRIS.....Ithaca
ALANSON BIGELOW HOUGHTON.....Corning
MRS. C. S. MONGIN.....Waterloo
ABRAM S. STOTHOFF.....Watkins

OFFICERS OF THE BOARD

PRESIDENT

HON. S. H. HAMMOND, Geneva

SECRETARY

WILLIAM J. POLLARD, Seneca Falls

TREASURER

HENRY PETERSON, Lodi

ATTORNEY FOR WILLARD STATE HOSPITAL

HON. S. S. PARTRIDGE, Phelps

CONSULTING SURGEON

DR. WILLIAM B. JONES, Rochester

RESIDENT OFFICERS

MEDICAL SUPERINTENDENT

WM. AUSTIN MACY, M. D.

FIRST ASSISTANT PHYSICIAN

WILLIAM L. RUSSELL, M. D.

SECOND ASSISTANT PHYSICIAN

THOMAS J. CURRIE, M. D.

ASSISTANT PHYSICIANS

ROBERT E. DORAN, M. D. JOHN W. RUSSELL, M. D.

CHARLES F. SANBORN, M. D. DONALD L. ROSS, M. D.

JUNIOR PHYSICIAN

ERVING HOLLEY

WOMAN PHYSICIAN

J. ERNESTINE HILLS, M. D.

MEDICAL INTERNES

THEODORE W. SIMON, M. D.

WILLIAM H. MONTGOMERY, M. D.

STEWARD

MORRIS J. GILBERT

MATRON

S. LOUISE LAIRD

REPORT OF THE BOARD OF MANAGERS

To the State Commission in Lunacy

The managers of the Willard State Hospital have the honor to submit the thirty-third annual report of this institution for the year ending September 30, 1901, together with the reports of the superintendent and the treasurer for the same period of time.

Respectfully submitted.

S. H. HAMMOND

President of the Board of Managers

REPORT OF THE MEDICAL SUPERINTENDENT

HON. S. H. HAMMOND, *President of the Board of Managers, etc.,
Geneva, N. Y.*

Dear Sir.—Herewith I enclose to you for presentation to the board of managers of the Willard State Hospital the usual annual report of this institution for the year ending September 30, 1901. Statistical tables, reports of the treasurer, steward, etc., will be found appended.

The following is the usual table showing the movement of population during the past year:

	Men	Women	Total
Remaining October 1, 1900.....	1,122	1,144	2,266
Admitted during the year.....	155	122	277
Total number treated during year.....	1,277	1,266	2,543
Average daily population.....	1,119	1,137	2,256
Discharged during the year.....	147	160	307

The patients discharged were divided as follows:

	Men	Women	Total
Discharged recovered	27	27	54
Discharged improved	21	36	57
Discharged unimproved	15	7	22
Discharged not insane.....	1	.....	1
Died	83	90	173
Remaining October 1, 1901.....	1,130	1,106	2,236

This table shows that there was a noted decrease of 30 people in the hospital population during the past year, brought about in this way: There was an increase of 8 men and a decrease of 38 women. The largest number under treatment on any one day was on December 3d, when the population was 2,284, and the smallest census was on September 27th, when the population was 2,237. Of the patients admitted during the year, 226

were brought direct from their homes, 15 were admitted from almshouses, 3 from city hospitals, 12 from jails, 14 were transferred from other New York State hospitals, and 7 were received from the Soldiers' Home. All of the patients admitted were public patients, and 11.5 per cent. of the whole number admitted were over 70, and of these 5 were over 80. The largest number admitted as to age were between the years of 40 and 50, and the second largest number were between the years of 50 and 60.

The percentage of recoveries, calculated on the average daily population, was 2.3 per cent. If calculated on the number of admissions, this percentage would be 19.6 per cent. Of the 134 patients discharged, 19 were transferred to other hospitals in this State; 45 were discharged at the expiration of their paroles; 65 went direct to their homes, and there were 5 elopements. Of the 5 who eloped, 2 were found after their discharge to be with their friends, 1 was afterwards recommitted to the hospital, and 2 have not been recovered, although there was no reason to think but what they had managed to get along outside, or were taken care of by their friends. One of these patients wrote letters to us from a western State, but as we believed that he really belonged in that State, though we had been unable to prove his residence, we felt that he would be probably taken care of by the authorities of the place where he was likely to stay, and that his case was such that it would easily draw attention to him and thus prevent the likelihood of his committing any overt act or having a chance to do anything very much out of the way.

The death-rate for the year was 7.6 per cent., based on the average daily population.

I regret to report two deaths by suicide occurring during the year. One man succeeded in cutting his throat with an employee's razor, which the said employee had not sufficiently protected, and one woman successfully eluded the attendants with whom she was out upon the grounds and threw herself into the lake and was drowned.

AMUSEMENTS

I have very little to add under this caption for the past year that would be new in the report. It is sufficient to state that the Commission has made us the same regular allowance as in past years for amusements, and these have been carried on in about the same way as heretofore.

We have purchased one or two new pianos, different games, etc. We have also had entertainments by outside talent from time to time during the year.

We felt it was not best to observe Field Day this year for the reason that we have had so much trouble with diphtheria; that at that particular time it was deemed unwise to bring our people too closely together.

OCCUPATION

Among the principal items that I would mention in regard to the matters that we have attended to through the occupation of our patients during the past year and outside of the usual shops and industries, which are now well known both through our reports and to those familiar with our hospital work, are the following: The cement foot-path from the center building to the Willard railroad depot was completed; we finished putting in the fire system from the east reservoir supply, connecting all the buildings and terminating at D. B. 4, and also connected barns and pasture fields with this water system, and supplied water troughs in various places. We also built cement water troughs to be located where the pipes terminated in the fields, and placed hydrants at the respective buildings so as to give us a fairly good equipment at the buildings from this water service in case of fire. At the branch the wall of the old coal shed had become very insecure. This was taken down and rebuilt. A very large amount of rock was quarried for our roads, and this, after being put through the rock crusher, was spread upon the main drive for a distance of about one mile, and the road was rolled and made over, the road roller being used whenever we could spare the help to run it. We also have

picked up certain other portions of the road, so that it seems as if in another season or two the principal drives of the hospital will be placed in excellent condition, though the road stone that we have to use for this purpose is not as good as trap rock or some kinds of granite which are available elsewhere.

Upon the roads near the lake we used a hard and dark shale that we found in our quarry, just underneath the Tully limestone formation, and this makes a fairly good road for light driving, though it pulverizes and becomes fine in a few seasons. A certain amount of grading was done in front of the superintendent's house so as to have the drive at that point more level where formerly it had been on a side hill, making it difficult to keep a team still when people were getting in and out of a wagon because of the incline of the road. Quite a number of trees were set out in the exercise field east of the electric light plant, and we were able to set young trees at detached building No. 2, and at a number of other places around the grounds. We also set hedges around the coal boxes at the outside buildings so as to make them less objectionable when the buildings are seen from the rear. We graded and seeded the lawn at the laundry for a bleaching ground. The old locomotive house in the rear of the main building was taken down and removed and a new building at a cost of about \$1,000 was erected south of the new laundry. This building is almost as convenient as the old one, and is now in a place where it is not unsightly and a detriment to the rest of the buildings. The building is supplied with water and heated by stove in winter, and was made large enough to accommodate our engine, together with a large size standard coach, thus giving better protection for the rolling stock of the railroad. East of the main building, in the grove between the building and the south wing, a number of new walks were built from different approaches, permitting the women patients hereafter to go to and fro from the buildings without having to walk through the muddy paths. An excavation was made for a new root cellar at the farm barns 28 x 66 feet and 8 feet deep. We also excavated under the old barn on

the lake farm and raised this building somewhat so as to have a basement cellar for a winter cattle barn, and the Commission in Lunacy have signified their willingness to allow us to sheathe this barn and put a new roof on it before the approach of cold weather. This will greatly increase our accommodations for stock and be a material improvement at the hospital. In building the root cellar at the farm barns we decided that we would build over this a superstructure for a toolhouse in which we would have room to place our wheelbarrows and other tools, particularly those which take considerable room. Two new stone silos, one 18 x 25 feet and the other 18 x 30 feet, inside measurements, were built, and these were surrounded by a wood jacket as advised in a bulletin issued by the Wisconsin Experiment Station. These silos were carried about four to six feet into the ground and built from that up, the top of each silo being finished off with some old brick that we happened to have on hand. We now have four silos at the hospital which in all will contain about 550 tons of silage for our stock, and even thus far, although the silos have only been filled a very few weeks, we have had practical demonstration that the silage is being kept very much better in stone silos than in the ones formerly built. There were quarried and delivered about the grounds 390 perch of stone for use for various purposes.

We loaded on our scow and brought to the hospital 600 yards of sand during the season. The sand we excavated from our own sand bank. We also have used the scow to material advantage to the hospital in other ways during the year, and recently brought from Watkins a load of over 100 barrels of salt. I mention this merely because the difference in getting this with our own help and on the barge was such that we were able to get the low price of 77 cents per barrel on the salt f. o. b., at Watkins, whereas quotations obtained any other way were comparatively a good deal higher. At the main building there was a cellar excavated for the new annex or clinic room. In the vineyard 1,300 new posts were set and wire was run upon the same. A considerable portion of the lawn

in front of detached building No. 1 was made over and graded. Various improvements were made around the bakery, and at the east end of the new storage building, and around the south wing, particularly in connecting the drain pipes and running them into ravines to take care of the surface water, etc. After the removal of the old round-house for the locomotive, the ground in between the storage building and the blacksmith shop was graded, and the track was thrown over eastward sufficiently to permit of a wagon road being run in front of the storage building. These changes effected a very great improvement in the appearance of this portion of our grounds. A new coal trestle was built at the main building to permit of our carrying a much heavier type of coal cars, such as the fifty-ton car or "gondola," in which so much of the coal is now being shipped, and a new trestle was also built at the infirmary for the same purpose. During the coming year there are some six more trestles that have got to be renewed, and we have been notified by the railroad company not to run any of these heavy cars upon them until such trestles have been replaced. Besides these improvements, which I have outlined in detail, all of the ordinary work of cleaning roads, grading for lawns, gathering crops, etc., have been attended to in the past year, the crops on the whole being about as good as on an average year, though early in the season we had reason to think that they would be very small as compared with some other season. In some respects, however, they have affected, as notable in the case of our vineyards, where the crop of grapes was only a little more than one-third as large as last year's crop, and in the matter of our tomatoes, which gave very much poorer results than usual and consequently decreased the number of cans that we could put up for our winter supply. Last year we were able to can about 6,000 gallons, but this year we estimate that we will only have about two-thirds the quantity. The hospital suffered somewhat from the scarcity of potatoes during the past year, and the crop on the hospital grounds has not been up to what it is usually. However, at the time when it was hardest for us to get

a supply of potatoes, we were compelled to resort to purchasing "culls" in the New York market, and though these were very inferior, yet they enabled us to give potatoes to our people which tasted very well, and though very small still were equally as nutritious as the larger ones. The drouth late in the season made our oat crop of exceedingly light weight, but in this we have only the same as in other localities, and on the whole we are greatly gratified to have as good crops as we have, particularly when compared with those gathered during and after the great drouth of last year which forced us to buy so much more than usual. The percentage of patients employed during the year were 51.52 per cent.

WORK OF THE MEDICAL STAFF

I have very little to specifically mention under this particular heading this year, especially as what remarks I might have to make will be more properly entered under the heading of diphtheria, or in relation to other matters. The usual staff meetings have been held, and the administration work of the hospital has been much facilitated by the opportunities afforded by these meetings for consultation and discussion. The Journal Club has continued to meet every second week, except during the hottest weather. Seven meetings of the Hospital Medical Society were held during the year, at which twelve papers were read and discussed and a number of interesting cases were presented.

I wish at this time to report that upon the previous recommendation of the superintendent, Dr. William B. Jones was appointed to the honorary position of consulting surgeon to this hospital, in which position he has heretofore assisted us so generously with his time and skill. Dr. Jones has visited the hospital quite a number of times during the year, and the results of our surgical cases have been exceedingly good, but are not mentioned here for the reason that they are recorded in the various hospital records and reports, and it is not thought

necessary to extend this report by referring to many matters of this kind which are so uniformly recorded elsewhere.

There has been an unusual amount of acute sickness among both patients and employees. One hundred and seventy-three cases have been admitted to the sick wards during the year, in addition to those cared for in the infirmaries for the aged and feeble, and those suffering from chronic diseases. Forty cases of pneumonia were cared for during the year, 23 of whom died; the death-rate from this disease being especially high among the men, ten out of thirteen cases having proved fatal.

The death-rate of the hospital on the whole number treated for the past year was 7.6 as against 5.57 per cent. for last year. This increase may be, in part, at least, explained by the large death-rate from pulmonary troubles, resulting from an epidemic of influenza and one of measles which prevailed during the year.

Towards the close of last year I regret to state that a number of cases of typhoid fever appeared, some seven in all, five of these being employees. These, with the exception of two, were all on the south wing of the main building. The plumbing of the wing was renewed during the year, and it is possible that there was some relation between this and these cases, which appeared almost simultaneously. It is gratifying to state that, although the disease ran its customary course and one or two cases were quite severe, all of the patients are well on the road to recovery.

SURGICAL WORK, ETC.

Thirty-six surgical operations of sufficient magnitude to require general anæsthesia were performed during the year; 15 of these were done by the resident staff, 14 by Dr. Jones, the consulting surgeon, and 7 by Dr. Kirkendall, the ophthalmologist. The more important operations were for the removal of tumors, the radical cure of hernia, cataract, mastoid disease, disease of the gall bladder, the cure of hæmorrhoids and repair of fistulæ, and for abdominal and pelvic conditions requiring laparotomies.

OPHTHALMOLOGICAL WORK

In addition to the several operations performed by the ophthalmologist, errors of refraction were corrected with glasses by him in 56 cases. In most of these cases there was a marked degree of disorder causing eye strain, and in some instances the resulting relief was very great. A number of inflammatory diseases of the eyes, not requiring operation, have also been treated.

GYNAECOLOGICAL WORK

Twelve operations for gynaecological conditions were done during the year, as follows:

Vesico-vaginal fistula.....	1
Fibro-myoma of uterus.....	2
Amputation of cervix.....	2
Perineorrhaphy	2
Curettage for endometritis.....	2
Curettage for polyp.....	2
Curettage of stercoro-vulvar abscess.....	1

Of the 122 women patients admitted to the hospital during the year, 108 were examined in reference to genital diseases. Of these 90 showed some gynaecological lesion, 58 of which were of a nature requiring treatment. Four hundred and seventy-two treatments were given during the year.

TUBERCULOSIS

Twenty-five patients died from this disease during the year, being 18.1 per cent. of the deaths. Eleven of the cases who died were women and 14 men. This death-rate is greater than that of last year, which was 14.7 per cent. The increase may in a measure be accounted for by an epidemic of influenza and another of measles which prevailed during the year, both of which were marked by a large amount of pulmonary trouble.

At the beginning of the year there were 42 patients in whom the diagnosis of pulmonary tuberculosis had been made, 26 being women and 16 men; at the close of the year there are 43 cases in which this diagnosis has been made, 28 of whom are women and 15 men. It is to be regretted that the steady diminution in the prevalence of this disease, indicated by the lowered death rate of the past few years, has not been sustained in the past year. Until better facilities are provided for isolation and for approved methods of treatment, however, little more can be accomplished. Under present conditions isolation is imperfect, the wards used are not suitable, and pure air, sunshine, baths and dietary can be utilized sufficiently freely and carefully. We have continued, as for a number of years past, what is known as the out-door treatment during as much of the year as it seemed at all possible or humane, patients remaining out of doors almost constantly, and we have tried to segregate our cases as much as our limited resources for this work has permitted. It is extremely desirable that in time separate pavilions for caring for tuberculosis cases should be erected upon the grounds of the hospital, enabling us to reduce the overcrowding in the buildings while at the same time providing entirely separate accommodations for patients having consumption. Now all of these cases that we can handle have to be sent to the branch and infirmary, the one building caring for women and the other for men, while I am obliged to state that a small proportion of other cases who will not fit in anywhere because of the classification of patients on the different wards, and for other reasons, are obliged to remain wherever they may happen to be in the institution. Still we make a determined attempt to keep all active cases entirely away from those patients who are healthy and from the sick.

A circular of information and regulations in regard to the prevention of this disease was issued during the year to be posted in the sick wards and distributed among the employees. This will be shown in the addenda.

MEASLES

There was an outbreak of this disease in the hospital beginning in February and lasting until June. There were 48 cases in all, 37 of whom were patients and 11 employees. The following table indicates the distribution of the disease:

LOCATION	PATIENTS			EMPLOYEES			TOTALS		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Main building, Ctr.					1	1		1	1
Main building, N. W.	17		17	3		3	20		20
Main building, S. W.		3	3		4	4		7	7
D. B. 1.	5		5	1		1	6		6
D. B. 3.	12		12	1		1	13		13
D. B. 4.					1	1		1	1
	34	3	37	5	6	11	39	9	48

There were three deaths—two patients and one employee. The employee who died was a vigorous young male attendant. He developed severe broncho-pneumonia, which proved intractable in spite of the most energetic treatment. One of the patients who died was also young and fairly strong, the cause of death being also in his case broncho-pneumonia. The other patient was old and feeble at the time he was attacked. Several other patients made fair recoveries, and some of them developed tuberculosis.

The disease was distributed by months as follows: February 1st, March 3d, April 26th, May 11th, June 7th.

DIPHTHERIA

This disease has continued to prevail almost without intermission throughout the year. There have been 47 cases in all, in which there were definite clinical signs of the disease; 12 of these were patients, 30 employees, and 5 were members of the officers' families. The following table shows the distribution of these cases among the various buildings for the year, and also since June, 1899:

LOCATION	PATIENTS			EMPLOYEES			OFFICERS' FAMILIES			TOTALS			Since June, 1899
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Main building, Ctr.....							1		1	1		1	5
Main building, N. W.....	6		6	8		8				14		14	18
Main building, S. W.....		6	6		6	6					12	12	26
D. B. 1.....				2		2				2		2	16
D. B. 2.....		1	1		1	1					2	2	5
D. B. 3.....													6
D. B. 4.....													10
Infirmary.....				3		3	1		1	4		4	16
Branch.....					6	6					6	6	14
Hillside.....													2
Superintendent's house.....					1	1	1	1	2	1	2	3	5
Employee's home.....				1		1				1		1	2
Steward's house.....							1		1	1		1	2
Farmer's house.....				1		1				1		1	4
Fan room.....				1		1				1		1	1
	6	7	13	16	14	30	4	1	5	26	22	48	132

As heretofore the disease has prevailed principally among the employees, and all except three of those affected were employed directly in the care of patients.

The cases were distributed throughout the year as follows: October 6th, November 2d, December 2d, January 2d, February 3d, March 2d, April 3d, May 1st, June 6th, July 1st, August 10th, September 9th.

There was one death—a female attendant who had been at the hospital for two weeks only. The diagnosis in this case was obscure, as the clinical signs were at first those of suppurative tonsillitis, and cultures from the throat showed strepto-cocci only. Four thousand units of antitoxin were administered on the fourth day, but without apparent benefit, and as no diphtheria bacilli had been found the remedy was not pushed. The patient died on the fifth day of toxæmia and heart failure, and the culture made the evening before she died showed a few diphtheria bacilli. This is the only death from diphtheria which has occurred in the hospital since 1897, though there have been several in the families of employees living outside the hospital premises.

The number of throat and nose examinations made during the year was 23,998, and 210 cases were found having Klebs-Loeffler



WILLARD STATE HOSPITAL.—BIRD'S-EYE VIEW OF HOSPITAL AND GROUNDS.



WILLARD STATE HOSPITAL.—THE NORTH WING OF THE MAIN BUILDING.



WILLARD STATE HOSPITAL.—VIEW OF BRANCH FROM THE NORTHEAST.



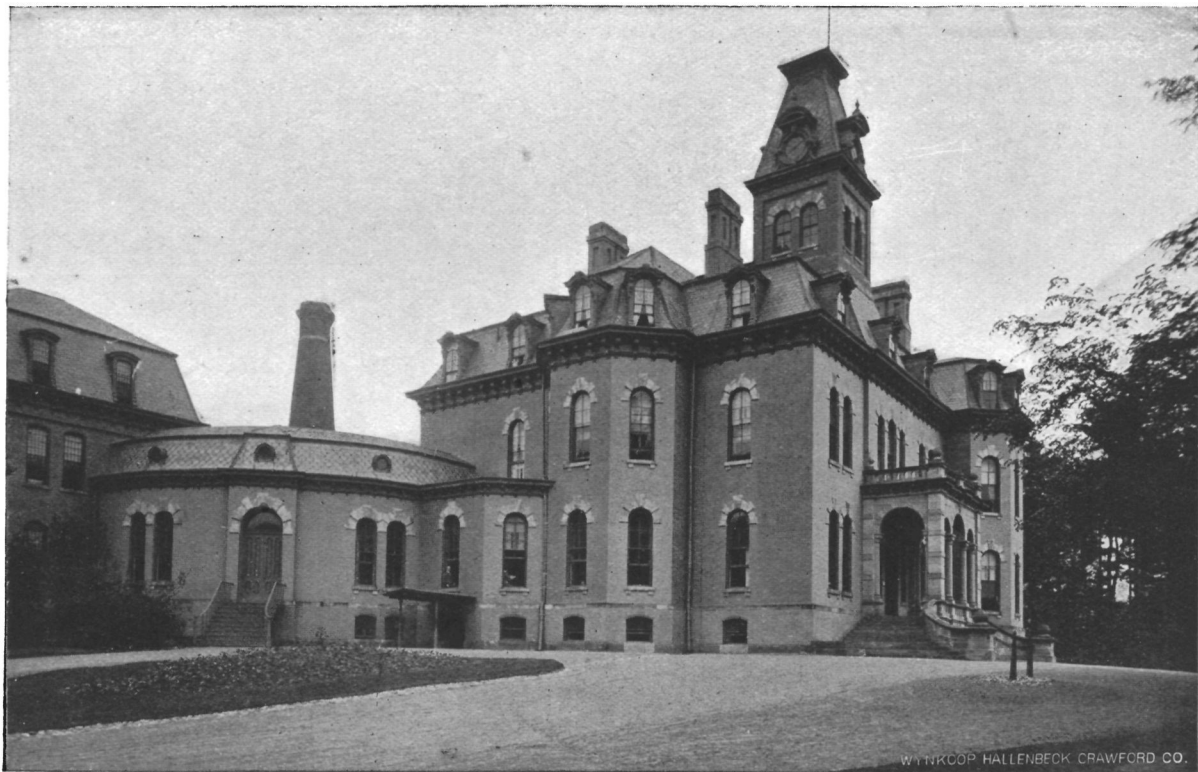
WILLARD STATE HOSPITAL.—VIEW OF BRANCH FROM THE WEST.



WILLARD STATE HOSPITAL.—VIEW IN FRONT OF ADMINISTRATION BUILDING.



WILLARD STATE HOSPITAL.—AMUSEMENT HALL.



WILLARD STATE HOSPITAL.—MAIN BUILDING.



WILLARD STATE HOSPITAL.—BIRD'S-EYE VIEW LOOKING TOWARDS THE LAKE FROM THE BRANCH.

bacilli, but presenting no clinical symptoms of diphtheria. The total number of cultures taken since June, 1899, was 72,150. Of the germ cases 190 were patients and 20 were employees.

During the year the committee on diphtheria bacilli in well persons of the Massachusetts Association of Boards of Health requested this hospital to assist them in finding the prevalence of Klebs-Loeffler bacilli in unexposed healthy people. On account of lack of unexposed persons we were able to assist them only to a limited extent. D. B. 3 was selected as the building most free from infection, and 82 throat and nose examinations were made, resulting in the finding of two germ cases.

We feel that there is some objection to the system followed by the committee in considering a certain class of people examined as uninfected. Whether in a large town or city or in an institution it is very hard indeed to say whether the people thus studied could be reasonably called uninfected or not, particularly for the reason that in a town or city there is or has been recently infection in the neighborhood, just as we have or have had infection in a large institution, making a distinction in this way between present time and different times past. Even if we do not find an infection in a certain division of an institution to-day with the ordinary methods usually followed, there is no way of telling whether infection may not actually be present in that certain healthy people are carrying around diphtheria germs upon certain inaccessible portions of the mucous membrane of the throat or nose. Experience tends to show that in a given community the disease little by little runs its course, and those in a receptive condition acquire the disease, which runs its usual course, and they get well and thereafter themselves come down again from time to time until the trouble finally loses its force and dies out. In the case of this particular hospital the duration of the disease has been exceedingly long, considering that the trouble has been almost entirely among adults. I know of no other case having the same history. Even in an institution for children the course of the usual epidemics is not so long as it has been in our case, though there

may be some exceptions. It will be of peculiar interest to all professional men to follow the course of the diphtheria epidemic at this institution, particularly if we can establish what special causes may exist to perpetuate this disease at this place, than is usually the case elsewhere. We are not inclined to attach too much importance to the matter of healthy people carrying diphtheria bacilli in their throats, except when these germs are virulent, for the reason that we recognize that in the general community, particularly in large cities, a certain proportion of people must be carrying these germs at all times. Healthy people can certainly transmit diphtheria to others by carrying to them germs which, in their own cases, give them no trouble, while still capable of producing disease in others in a receptive condition. I believe that in many cases these germs become attenuated and gradually lose virility to such an extent that the disease reaches a point at which it can no longer redevelop. On the other hand, there is reason to draw the deduction that if these same germs become implanted on exceedingly favorable soil, just as they become attenuated on the one hand, on the other they gradually increase in virility until a new epidemic centers elsewhere than before. Very much indeed depends apparently upon the receptive condition of the individual exposed to the disease, and we have a large number of varying conditions both of infectiousness on the one hand and virulence on the other, and according as to whether the disease is on the increase or on the wane the results are either insignificant or easy to attain much importance.

We are still able to note the finding mentioned in previous reports, to the effect that we have not found that the diphtheria has become reestablished in individuals once discharged from quarantine after having obtained three successive negative cultures taken on alternate days, unless these people suffered exposure in an infected ward. As to how much value this finding has, aside from its practical application in enabling us to set some definite time on which to discharge from quarantine, remains to be seen. We believe, however, that on a large

amount of mucous membrane in the throat and nose, which is inaccessible, it is very possible that small colonies of attenuated germs might lurk unsuspected for a long time, and with the change in the condition of the system gradually increase in virulence until capable of spreading disease of a very malignant character. Even if we are unable to get any facts that are more definite, the experience referred to has been in the case of this institution of very great assistance in helping us to stamp out the diphtheria, and bacteriologists will recognize that we have gone rather further in basing our limits than is usually done in the ordinary health board work.

Of the various types of bacilli, as described by Professor F. F. Westbrook, Minneapolis, Minn., the most commonly found are those illustrated in his Plate II, fig. 1, and Plate IV, fig. 1. Of the types described by him in Plate IV, fig. 3; Plate V, fig. 3; Plate VI, fig. 4, none have been observed in any membrane case during the year. Comparisons were made as to the after effects of antitoxin of different strength, resulting favorably to the use of the concentrated form.

We have had until the present time some few patients in our detention wards almost constantly throughout the entire year, and for a great deal of this time patients who were convalescing within the quarantine ward as well as those confined in detention wards. Very recently (October 1, 1901) we have been able to discharge the last patient that we had in our detention wards, though we still hold five or six people in the quarantine building proper, proceeding through convalescence from this disease. A new element that has come up in this matter has been the appearance of the diphtheria in the families of the employees upon the street. Until this season we have always been able to confine the trouble, providentially, within the buildings of the hospital, but this year it has appeared on the street just outside of our grounds among the children of our employees, and there have been two or three deaths from this trouble, and just now there are one or two active cases still under treatment. With this disease having a foothold in the

outside community, we feel that it is going to be harder to stamp this trouble out even than when it was confined to the institution.

All the usual methods of handling quarantine—disinfection of wards, rooms, clothing, bedding and other articles,—and every other known measure of stamping out this disease, have been followed, though apparently we are still having to fight it. It would seem as if there were some peculiar local conditions that predispose to this disease in the Willard State Hospital, and this matter is being given careful attention by the hospital authorities. We do know that there is reason to believe that the contaminated water supply has a direct as well as indirect effect by lowering the vitality of the people, or directly producing throat troubles which are recognized by some bacteriologists as attributable to polluted water, so that the diphtheria bacillus being present is easily ingrafted upon the inflamed throats which result from the various conditions referred to. It is possible, too, that the proximity to the lake, where the water is so exceedingly cold, and the varying air currents during the twenty-four hours, some of them being very much colder than others, result just as in other cases near large bodies of water and upon the sea coasts in an increased number of colds and sore throats among those residing at those places. While we continue to have buildings needing to be replumbed, and other bad sanitary or hygienic conditions, such as contaminated water supply, defective drainage around the cellars of our buildings, or cellars which are not effectually sealed from ground damp, etc., we will hardly know what to attribute the continuance of this epidemic of diphtheria to. We hope eventually to be able to get appropriations from the Legislature to remedy the conditions referred to, and trust that we will then be able to put a stop to this disease, even if it does not disappear long before.

I feel that there is reason for more apprehension, as I stated before, to dread the appearance of diphtheria in the families of our employees than its actual occurrence in the institution. The

average medical practitioner in private practice and the average health board seldom take the precautions that we have taken in stamping out the disease, they taking the ground that it is impossible ordinarily to have people remain contentedly in the irksome restrictions necessary to bring the disease to a standstill by enforcing quarantine, etc., when prescribed in the same manner as we have done, and I very much fear that in the case of this neighborhood it may be necessary later for steps to be taken to try and get the State Board of Health to regulate and establish the system to be followed in the surrounding community in passing upon cases of throat inflammation and in quarantining people known either to have diphtheria or to be carrying Klebs-Loeffler bacillus in their throats. At present in the case of some of the medical practitioners no germ cultures whatever are taken in any ordinary cases, and I have been told of some that were suspiciously like diphtheria which were also treated in the same way. If this practice continues in the future, even if we get rid of the disease in the institution, I am afraid we are destined to have a long run of the trouble from its reintroduction from outside, and the only way apparently of remedying this would be to get cooperation along the same lines that we have followed by those medical practitioners whose territory immediately adjoins the hospital, or if we get a case where we can definitely prove that diphtheria is brought into the hospital, for us to institute legal proceedings against those through whose neglect or carelessness it may have had a chance to spread.

AUTOPSIES

Thirty-one autopsies were made during the year. There has been a decided falling off in the number of autopsies during the past two years, as indicated by the following figures:

Bodies buried in hospital cemetery	Years	Autopsies
45	1897-98	45
56	1898-99	46
42	1899-1900	28
52	1900-1901	31
==	=====	==

The number of autopsies has to be regulated to some extent by the wishes of the friends as to this matter.

LABORATORY

The laboratory work as carried on in the past year has been principally devoted to the handling of the diphtheria epidemic by reason of necessity. Some other work of a special character has been followed, but for the most of the time our resources have been pretty well taxed to their utmost with the examination of cultures for diphtheria bacilli and other work of this kind. Extra assistants have been employed from time to time during the year by permission of the Lunacy Commission, as has also extra help in replacing those that were sick elsewhere. Still in the laboratory there have been times when we found it very difficult to get anybody to fill the positions satisfactorily and to assist as we have desired in the culture work, especially during the college year when all the young men whom we would be most likely to look for are engaged with other studies.

MEDICAL LIBRARY

The number of bound volumes in the medical library was increased by 117 during the year.

TRAINING SCHOOL FOR NURSES

During the past year there were 40 applicants admitted to the school; 17 were graduated from the school—13 women and 4 men, and 20 passed the junior examination.

The number of changes during the past year among the employees has been a disadvantage to the training school, as referred to in the year previous. Last year there were 139 all told who left the hospital, for the most part by resignation. These changes we feel are very largely because of the isolation of the hospital and its inaccessibility. If at some time in the future an employees' home could be built with women, with good large and attractive recreation rooms attached to it, and

some additional facilities of the same sort provided in the way of recreation rooms for the men employees, I am of the opinion that those who come to the institution, by reason of their finding their surroundings so much more pleasant, would be more inclined to remain contentedly during the period for which they usually engage when coming here.

Six volumes were added to the nurses' library. This library has been a real acquisition, as can readily be appreciated by an examination of the record showing the extent to which it has been used.

PATIENTS' SCHOOL

This has been conducted regularly as heretofore, and we think with decided advantage to the patients. Ninety patients have attended, the average daily attendance being 28; 34 of those who were attending school have been discharged during the year. In addition to the regular school exercises the teacher has given instruction in calisthenics, dancing and basket-ball, and several outings and entertainments were enjoyed during the year. The public recital, consisting of a programme of vocal and instrumental music, readings, recitations and tableaux, was very successful, and was a source of pleasure to all the inmates of the hospital. Altogether the work of the school is of considerable value.

COST OF MAINTENANCE, ETC.

The per capita cost for maintaining this hospital for the past year was \$3.06, and, while this exceeds the per capita of last year, which was \$2.966, I would draw attention to the fact that our expenditures were necessarily very much larger than last year owing to the failure during the past year of the farm crops, due to the great drouth from which this section suffered. We also had some expenditures chargeable to the quarantine that it was necessary to maintain because of the diphtheria in the hospital, and in some instances there were expenditures charged during the past year to maintenance account, which I believe in

some other years were charged to extraordinary improvements or to repairs. Except for reasons of this kind, the hospital was run in the same manner and approximately in exactly the same way as previously, and there were therefore good reasons for the increase in cost noted.

BANK FAILURE

Under this heading I have to report to your board that the depositary for the funds of the Willard State Hospital suspended operations April 25th of this year, and a large amount of funds of the hospital were tied up because of this suspension. It happened that the wages had been paid, except for such moneys as had not been collected by those to whom they were due by reason of their failing to present their checks, or their not having been here at the time, and all of the vouchers for the March payments had been prepared and were all ready to deposit in the mail the morning the bank failed, when of course it was too late to send them out.

Our quarterly report, based upon anticipated payments that we knew to be absolutely correct because of the presentation of bills corresponding to amounts, etc., had been forwarded to the Comptroller, and this showed that we had but a comparatively small balance in the hands of the bank, though the reason for this was the fact that we have always been hurried to get this report to the Comptroller and the Lunacy Commission at as early a date as possible to enable them to tell what provision they would have to make for the ensuing period. Even had the vouchers and checks been mailed to the creditors at the time referred to, it would have been too close to the failure of the bank for us to avoid payment, as we could not have claimed that due diligence had not been exercised by the parties receiving these checks on account of their not having any opportunity to get them back. The result, therefore, would have been the same had the checks been sent out as it was their not having been sent out. However, this failure brought to our attention the fact that owing to the bank being somewhat at arm's length

from the hospital, it was possible for the depositary to hold these funds rather longer than would be the case with the treasurer's office established in the hospital buildings, and since this occurrence the treasurer's office has been moved permanently to the hospital, and we find that business has been expedited considerably by this change. The amounts tied up in the bank are shown by the following list:

Patients' funds.....		\$2,040 46
Salaries	\$159 01	
Wages	361 50	
Supplies	20,353 56	
		<u>\$20,874 07</u>

To meet the payments of the March bills, which were held back because of the failure of the bank, and the loss of the funds set aside for the payment of these vouchers, the Commission finally made arrangements with the State Comptroller to advance to us from the maintenance account amounts that would offset what we had tied up in the bank, this step being taken to prevent the impairment of the credit of the hospital and the State, and all outstanding bills were settled with money thus advanced. The depositary of the funds of this hospital was known as the banking house of Leroy C. Partridge, and since the failure this bank has been placed in bankruptcy and proceedings are now under way, under the referee in bankruptcy and three trustees, to settle up the affairs of the concern. It is impossible for us to say what the State will get out of this settlement, but there is good reason to believe that the dividends paid are likely to be quite small. You will notice in the table above that the moneys are divided up under State funds, and that there is also an item of moneys deposited and credited to the treasurer of the hospital by transfer some time last year from the steward of the hospital that have been accumulating at the institution for many years that are known as patients' funds. These moneys consist first of moneys that were brought

in upon the person of the patients admitted to the institution, varying from a penny to several dollars or more; next of moneys given or sent a patient or to the hospital for the patient for the purchase of luxuries for the patient; and thirdly, interest that had accumulated on the deposits made by the steward in times gone by. These sums were previously carried by the steward and cannot be treated as State funds, and I presume that these moneys will have the same relative position as the deposits of single creditors, and that some day dividends will be paid over to the treasurer to offset the sums deposited for the patients in the bank as referred to. It would seem as if, this being the case, that it would be very difficult to know how to divide or even prorate this money, particularly as a good many of the patients must have been dead for years, and in all probability this will constitute a small and rather insignificant fund in the future that may some day have to be disposed of by order of the courts or by a special act of the Legislature. I merely mention it at this time so that it may be a matter of record, and also to properly inform your board as to the exact situation of matters.

IMPROVEMENTS

Under this caption I give a list of the principal items that were attended to during the past year under the head of extraordinary expenditures. This list is practically self-explanatory, and therefore I will not go into all of the details in narrating what each item consists of. As will be seen, in some of the cases the work done was in continuance of work begun and undertaken during the previous year.

Additional laundry machinery.....	\$213 95
Steam carving tables (cast iron).....	46 50
Work on food-car tramway to kitchen.....	151 25
Food-car tramway doors.....	73 20
Spray baths at infirmary and branch.....	701 75
Steam heating plant at hotel.....	477 61
Switches at locomotive house and scales.....	423 48

Addition to hillside.....	\$300 22
Furniture	651 75
Sewer, D. B. 4 to lake.....	82 50
Pantries, D. B. 3.....	728 86
North annex to main building.....	2,045 24
Trestles at main building and infirmary.....	447 39
Iron beds.....	242 25
Main steam pipe, renewals.....	1,515 13
Radiators, attendants' rooms.....	710 17
Safe for superintendent's office.....	150 00
Changes and improvements in heating apparatus in pursuance of recommendations of Mr. R. S. Hale, mechanical engineer and expert.....	1,374 81
Plumbing in south wing.....	6,275 00
Laying water pipe in garden.....	573 78
Kinyoun-Francis autoclave.....	90 00
Sewing machines.....	105 00
Changes in fan room.....	106 74
Two stone silos.....	1,126 09
Safe for treasurer's office.....	160 00
Changes in refrigerator building.....	152 79
Repair roofs and paint outside buildings.....	170 60
Root cellar.....	492 02
Repairs to barn at lake farm.....	290 43
Cement walks	240 00
Repairs to hotel.....	117 57
<hr/>	
The sum total for extraordinary expenditures amounted to.....	\$20,775 27
<hr/>	

NEEDS OF THE HOSPITAL

Last year, before the time of the fall visit made the Lunacy Commission, we are asked to prepare a list of items which we wished to have considered, and these were looked over in detail by the Commission at the time of their visit and certain ones selected for incorporation in the budget of the expenditures to

the Legislature, and early in the spring we were notified to continue the work laid out under this list, which is partly included among a number of items figuring in the above list. Other matters, as for instance the tile floor for the kitchens at the infirmary and detached building No. 1, are still in hand, and it may be necessary to run these over until spring before being able to complete the work. The reason for this delay has been that, owing to the steel strike this year, it will be almost impossible to get the beams that are needed in the flooring, and one delay has come after another until with the approach of cold weather we may deem it best not to have this undertaken until the warm season comes again. There are other matters still, like the change of the water supply, etc., which have required very thorough investigation and close study of all of the matters appertaining thereto in order to avoid useless expenditure of large sums of money, and this also remains still to be attended to. Then again, in the matter of the plumbing of the different buildings, there was approximately a matter of \$10,000 set aside for completing this work, and this matter was referred to the State Architect's office, but we have not as yet been supplied with plans and specifications so that this work could be advertised for, but undoubtedly this will be well in hand during the coming winter and spring. For the coming year we were a little more hurried concerning the preparation of our estimates than last year, and owing to sickness and other matters we were not able to have some of the estimates completed at the time of the visit of the Commissioner in Lunacy to consider these items. The result was that one item which we would have liked to have considered—the building of a congregate dressing and clothing room in connection with the congregate bath room already supplied on the north wing, together with a staircase and fire escape which we have desired to have built for some years, and which change would give us a number of additional rooms for patients on that wing, besides increasing the economy of administration, etc.—has had to go over until another year. With this exception I give simply a copy of the

list furnished the Commission, which includes all items brought to their attention, but which was not passed upon at the time of the visit so that we could tell what items were approved.

IMPROVEMENTS AND REPAIRS DESIRED DURING 1902

Additional irrigating pipes in garden.....	\$2,500
Sidewalks and gutters.....	350
Connecting corridors, three remaining ones D. B. 2..	1,800
Coal trestles, to replace old ones, six at \$300 each...	1,800
New boiler for steamboat.....	1,000
Changing drawheads and air-brakes on cars.....	964
Cold storage building	1,800
Additions and repairs to lake farm.....	550
Enlarging boot rooms and additional story. (This will save at least one-half hour per day for every patient going to work.) \$400 each.....	1,600
New forcing house in garden.....	650
House for tenant near piggery.....	900
Change in water supply. (Cannot estimate cost at present.)	
Fire-proof vault for public records, and extension to medical offices	5,000
Extension of culvert across ravine near south wing.	500
Poultry house and yards.....	500
Outside and inside painting of buildings.....	3,500
Fruit orchards and vineyards.....	300
Improvements to basements. (Cost not estimated.)	
Tuberculosis wards. (Cost not estimated.)	
New locomotive.....	10,000
New plumbing	10,000

MEDICAL STAFF

Among the medical staff there have been the following changes during the past year: Albert G. Bising, medical interne, appointed to the position of junior physician at the Long Island State Hospital, Kings Park, December 1, 1900; William J. Cavanaugh, M. D., appointed medical interne, January 8, 1901,

and transferred to Hudson River State Hospital, January 18, 1901; Theodore W. Simon, M. D., appointed medical interne, February 25, 1901; Robert M. Andrews, M. D., resigned September 26, 1901, to go into private practice; William H. Montgomery, M. D., appointed medical interne, September 28, 1901.

EMPLOYEES

The following deaths occurred among the employees during the past year: James Martin, fireman, killed at electric light plant by runaway car November 30, 1900; Mrs. Anna C. Lovelace, supervisor, died January 4, 1901; John M. Ryan, attendant, died April 17, 1901; Emma J. Fish, D. R. attendant, died May 29, 1901; Gertrude J. Frazer, attendant, died August 24, 1901.

ACKNOWLEDGMENTS

Religious services of visitation have been performed during the past year, and we desire to tender our thanks to Rev. H. A. Porter, Rec. C. W. McNish, Rev. Wesley Mason, Rev. Joseph W. Hendrick, Rev. J. A. Kennedy and Rev. Thos. J. Harrington, who succeeded Rev. J. A. Kennedy during the year, all of Ovid.

Contributions of reading material have been received as follows:

Attica News, Attica, N. Y., 1 copy.

Auburn Weekly Bulletin, Auburn, N. Y., 1 copy.

Auburn Democrat and Argus, 1 copy.

Allegany County Democrat, Wellsville, N. Y., 2 copies.

Albion Free Lance, Albion, N. Y., 1 copy.

Addison Advertiser, Addison, N. Y., 2 copies.

Addison Record, Addison, N. Y., 1 copy.

Batavia Daily News, Batavia, N. Y., 1 copy.

Batavian, Batavia, N. Y., 1 copy.

Brooklyn Eagle, Brooklyn, N. Y., 1 copy.

Cochecton Times, Cochecton, N. Y., 1 copy.

Cayuga Chief, Weedsport, N. Y., 1 copy.

Castilian, Castile, N. Y., 1 copy.

Christian Uplook, Buffalo, N. Y., 1 copy.

Caledonia Advertiser, Caledonia, N. Y., 1 copy.
Cayuga County Independent, Auburn, N. Y., 1 copy.
Cuba Patriot, Cuba, N. Y., 1 copy.
Clyde Times, Clyde, N. Y., 1 copy.
Deaf-Mute Journal, New York city, 1 copy.
Dansville Advertiser, Dansville, N. Y., 1 copy.
Democratic Herald, Clyde, N. Y., 1 copy.
Dryden Herald, Dryden, N. Y., 1 copy.
Farmer Review, Farmer, N. Y., 2 copies.
Geneva Advertiser, Geneva, N. Y., 1 copy.
Geneva Gazette, Geneva, N. Y., 1 copy.
Geneva Courier, Geneva, N. Y., 1 copy.
Groton and Lansing Journal, Groton, N. Y., 1 copy.
Holly Standard, Holly, N. Y., 1 copy.
Hammondsport Herald, Hammondsport, N. Y., 1 copy.
Hornellsville Times, Hornellsville, N. Y., 1 copy.
Hornellsville Weekly Tribune, Hornellsville, N. Y., 1 copy.
Ithaca Daily News, Ithaca, N. Y., 3 copies.
Ithaca Democrat, Ithaca, N. Y., 1 copy.
Livingston Republican, Geneseo, N. Y., 1 copy.
Lake Shore News, Wolcott, N. Y., 1 copy.
Le Roy Gazette, Le Roy, N. Y., 1 copy.
Livonia Gazette, Livonia, N. Y., 2 copies.
Montour Falls, Free Press, Montour Falls, N. Y., 1 copy.
Mount Morris Enterprise, Mount Morris, N. Y., 1 copy.
Naples Record, Naples, N. Y., 1 copy.
Orleans American, Albion, N. Y., 1 copy.
Oakfield Reporter, Oakfield, N. Y., 1 copy.
Ovid Gazette and Independent, Ovid, N. Y., 2 copies.
Ontario County Times, Canandaigua, N. Y., 1 copy.
Ontario County Journal, Canandaigua, N. Y., 4 copies.
Prattsburg News, Prattsburg, N. Y., 1 copy.
Perry Herald and News, Perry, N. Y., 2 copies.
Penn Yan Express, Penn Yan, N. Y., 1 copy.
Penn Yan Democrat, Penn Yan, N. Y., 1 copy.
Seneca County Courier, Seneca Falls, N. Y., 1 copy.

Seneca County Journal, Seneca Falls, N. Y., 1 copy.
Seneca County News, Waterloo, N. Y., 1 copy.
Seneca County News, Geneva, N. Y., 1 copy.
Seneca Reveille, Seneca Falls, N. Y., 3 copies.
Southern Steuben Republican, Woodhull, N. Y., 1 copy.
Spirit of the Times, Batavia, N. Y., 1 copy.
Steuben Courier, Bath, N. Y., 1 copy.
Steuben Farmer's Advocate, Bath, N. Y., 1 copy.
Truth, Catholic Magazine, Raleigh, N. C., 1 copy.
Union Springs, Advertiser, Union Springs, N. Y., 1 copy.
Victor Herald, Victor, N. Y., 1 copy.
Waterloo Observer, Waterloo, N. Y., 1 copy.
Watkins Express, Watkins, N. Y., 1 copy.
Watkins Democrat, Watkins, N. Y., 1 copy.
Watkins Review, Watkins, N. Y., 1 copy.
Union and Advertiser, Wayland, N. Y., 1 copy.
Yates County Chronicle, Penn Yan, N. Y., 2 copies.
New York Herald, New York, 24 copies.

SPECIAL ACKNOWLEDGMENTS

I desire to again note in my official report the assistance and cordial cooperation shown us in regard to the handling of our epidemic of diptheria by Herman M. Biggs, M. D., and William H. Park, M. D., of the New York health department. These gentlemen have indeed been most kind to us during the fight that we have had with diptheria, and it is gratifying to me to be able to record our appreciation.

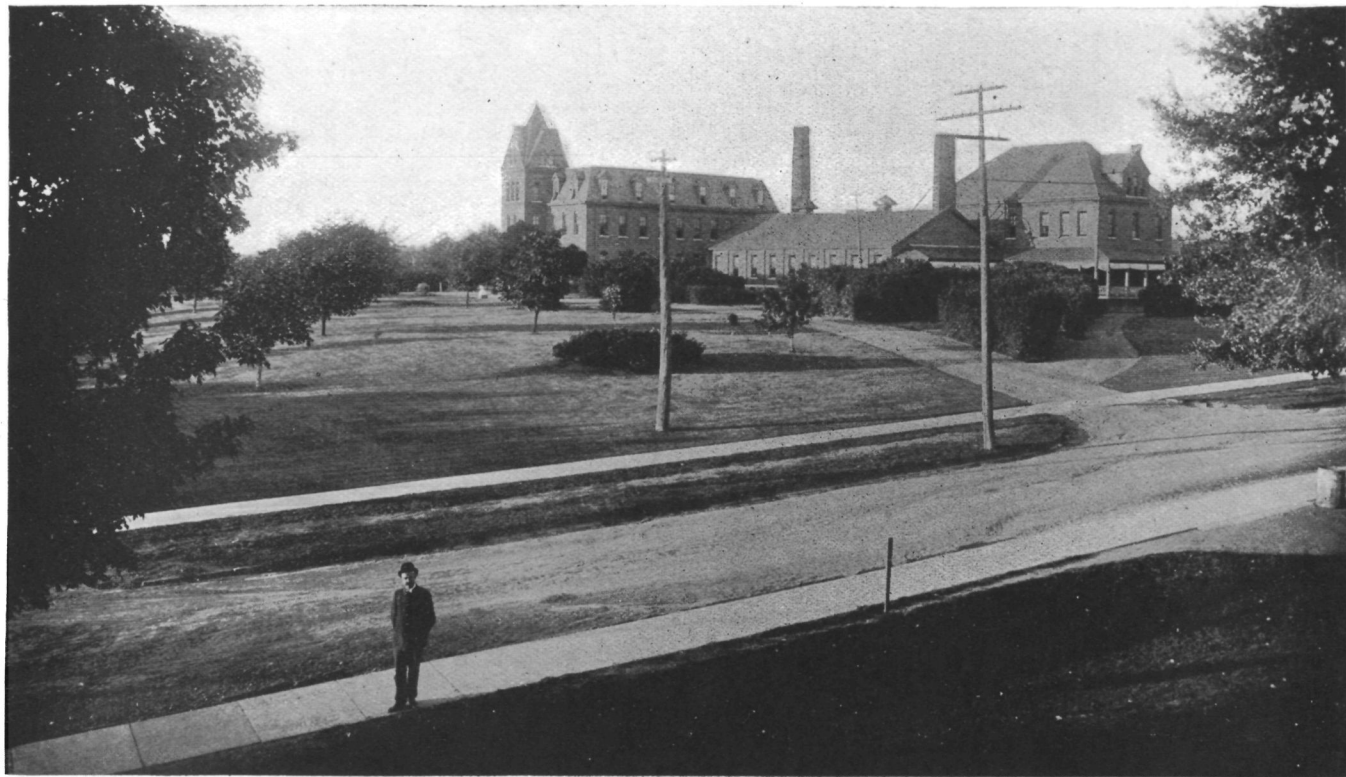
OFFICIAL VISITS

The members of your board and members of the State Commission in Lunacy have visited the hospital from time to time during the past year.

Dr. Robert Ellis Jones and Mrs. Clara E. Field made several visits to the hospital during the past year for the State Charities Aid Association.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 1. PATIENTS MAKING A NEW ROAD.



WILLARD STATE HOSPITAL.—INFIRMARY FOR MEN.



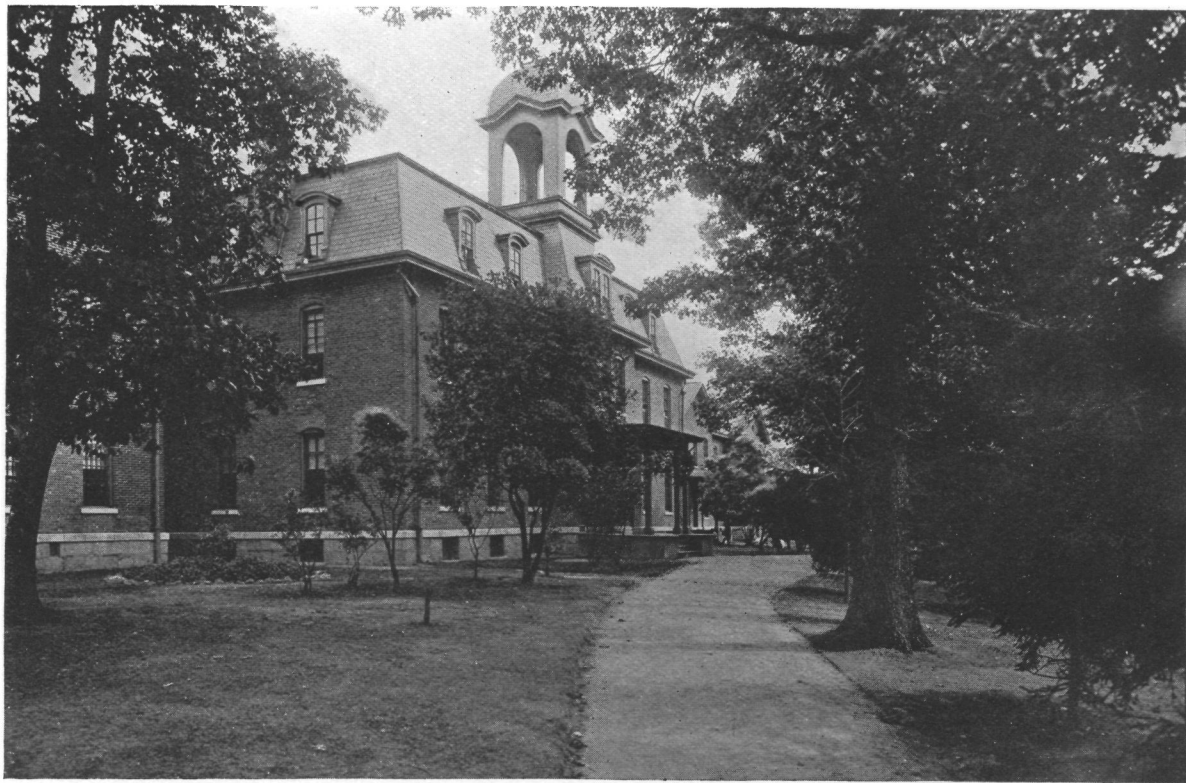
WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 3.



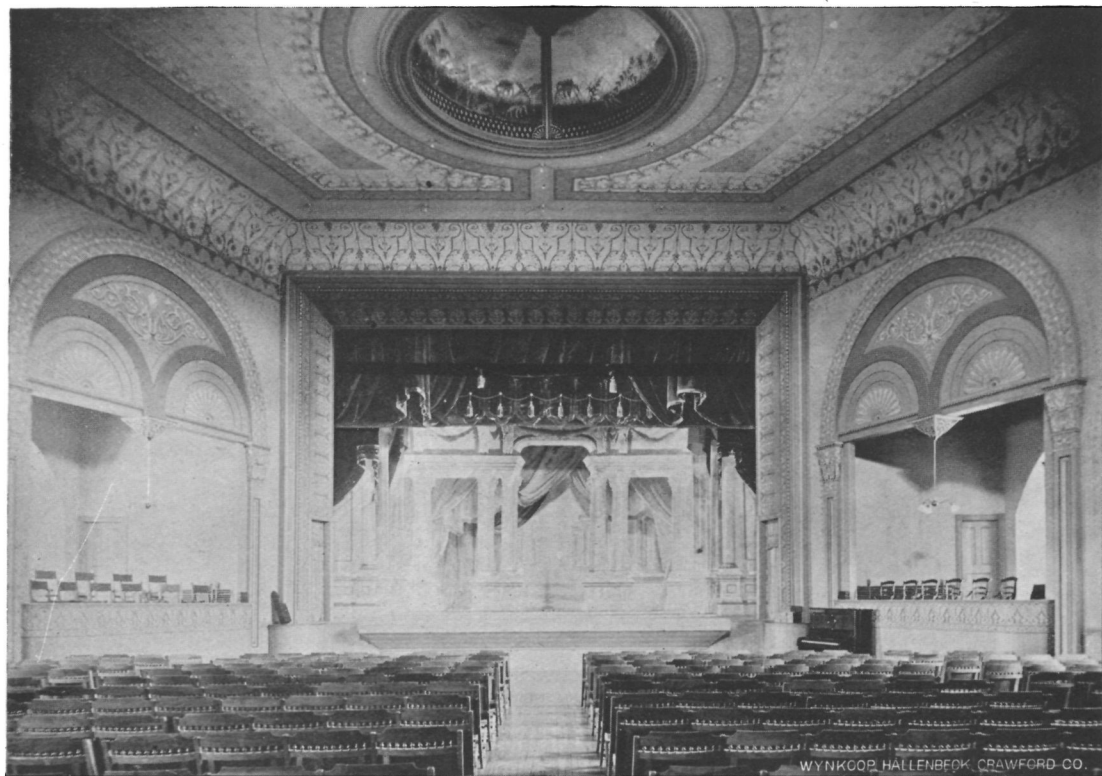
WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 1.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 4.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 2.



WILLARD STATE HOSPITAL.—INTERIOR OF AMUSEMENT HALL.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 3.

HISTORICAL REVIEW

I wish to draw particular attention to the historical account concerning this hospital which I have copied directly, but with the addition of a few remarks, explanatory tables, etc., of my own, from the report written by the superintendent of the institution in 1887, and printed at that time on the hospital press. There are many items of historical value concerning the hospital in this account, particularly in regard to the early acts of the Legislature, etc., and I do not remember having seen this account in any of the annual reports. It is placed in the report for this year because of the convenience for reference in the future, though I have left out certain plans of the buildings, etc., which were contained in the original historical account.

Very respectfully yours,

WM. AUSTIN MACY

Medical Superintendent

ADDENDA

NOTES OF VISIT OF COMMISSIONERS PETERSON AND PARKHURST TO
WILLARD STATE HOSPITAL JULY 17 AND 18, 1901

The Commissioners arrived the evening of July 16th and departed at 11 a. m. July 18, 1901.

The superintendent, Dr. Macy, was quarantined with diphtheria, but matters were discussed with him as required. Dr. Russell and the rest of the staff were on duty.

All of the patients committed during the past sixteen months (since the last visit of Dr. Wise, March 17, 1900), and still remaining, were seen by the Medical Commissioner. Lists filed at Albany.

All departments were inspected by both Commissioners—buildings, farms, outhouses, etc.—with a view to necessary improvements or additions. The administration is commended. Everything pertaining to the welfare of the patients is efficiently done and well ordered.

FREDERICK PETERSON

WILLIAM L. PARKHURST

WILLARD, N. Y., *July 18, 1901*

STATE OF NEW YORK—WILLARD STATE HOSPITAL

CARE OF TUBERCULOSIS PATIENTS—MEMORANDA AND RULES

The Nurse

1. Tuberculosis is a preventable disease, and it is the duty of the nurse to see that rules to prevent its spread are observed by herself and others.

2. The sputum is the greatest source of danger, especially when it becomes dry.

3. When working about a patient, always wear over your uniform a washable gown with sleeves. This must be worn only then, and must be kept absolutely clean and disinfected.

4. Avoid standing close in front of a patient who is coughing or speaking.

5. Wash your hands frequently, and always just before eating.

6. After handling a patient or any article in contact with him, dip your hands in disinfectant, after washing. Wear rubber gloves when cleansing spittoons, cups, or other articles soiled with sputum. Be careful at all times to protect with collodion any abrasion or cut on your hands.

The Patient

1. Fresh air, sunshine, abundant, wholesome, nutritious food are the essentials.

2. Keep patients out of doors as much as possible, and in the sunshine, unless too warm. Shelter from high wind.

3. All ailments, however slight, should be reported to the physician as soon as possible.

4. Keep close clinical records. Weigh all patients not confined to bed weekly, and note weight on chart.

5. As far as possible the patient should be induced to cooperate in carrying out preventive measures—in caring for sputum—placing a handkerchief before the mouth when coughing, etc.

6. Great care should be taken to keep patient's nails, hair, mouth, teeth and face perfectly clean and disinfected. Male patients must be clean shaven.

Care of the Ward or Room

1. Sunshine and fresh air must be admitted freely. At least one window should be open all night, and several times a day the patients should be made comfortable, and one or more windows opened.

2. The temperature should be seldom over 65°, and the patients should be warmly clad.

3. Scrupulous cleanliness must be the rule.

4. Flying dust is dangerous. Brooms, brushes, feather dusters, or dry cloth dusters must not be used. Cleaning and dust-

ing of floors, woodwork, furniture, etc., should be done by means of damp cloths. These should be washed at short intervals during the work and soaked in disinfectant before they are put away.

5. Rugs, mattresses, table covers, blankets, etc., should be placed in the sunshine outdoors for four or more hours twice weekly.

6. Floor, furniture, bedsteads, woodwork and sidewalks, as high as can be reached, should be washed with disinfectant twice a week.

Clothing and Bedding

1. Bedding, clothing, towels, handkerchiefs, napkins, etc., must be kept scrupulously clean, and changed frequently.

2. If such have been about a patient they must be placed in water immediately upon removal, and afterwards boiled or placed in disinfectant.

Dishes, etc.

1. Dishes, glasses, spoons, etc., must be placed in water and boiled or washed in disinfectant immediately after being used by patients.

2. Portions of food left by patients must be burned, and the vessel in which they were carried boiled or washed with disinfectant.

Sputum

1. Patients should as far as possible be induced not to swallow the sputum.

2. As far as possible they are to be taught to use spittoons and cups.

3. When this is not possible, moist rags which should be at once placed in water may be used. In exceptional cases a bib may be necessary.

4. A little water must always be kept in spittoons, and a small piece of wet cotton in each cup.

5. The paper portion of cups must be burnt once daily, and

oftener unless sputum is scanty. Rags must be used once only and kept moist until destroyed. Bibs must be changed when soiled, before sputum dries. Spittoons and the metal portion of cups must be cleaned and soaked in disinfectant once daily, and oftener unless entirely free from soiling by sputum.

6. If sputum lodges on an article of clothing, bedding, etc., the article must be at once removed, and treated as directed above.

7. If sputum lodges on the floor, wall, furniture, mattress, etc., it must be removed at once with a piece of moist paper or rag, and the place washed with disinfectant.

8. Evacuations from the bowels, discharges from abscesses, etc., in tubercular cases are to be treated as sputum.

WM. AUSTIN MACY

Medical Superintendent

March 1, 1901

REPORT OF THE TREASURER

To the Board of Managers, Willard State Hospital

Gentlemen.—The undersigned, the treasurer of the Willard State Hospital, submits the following statement of receipts and disbursements for the year ending September 30, 1901:

Receipts

Balances on hand October 1, 1900:

To salaries	\$24 98
To wages	273 22
To supplies	144 01
To clothing manufacturing department	1,661 09

Total balance on hand October 1, 1900.....	\$2,103 30
Received from State Comptroller for salaries...	20,310 00
Received from State Comptroller for wages.....	129,300 00
Received from State Comptroller for supplies...	205,500 00
Received from reimbursing patients.....	20,705 20
Received from private patients.....	448 14
Received from steward's sales.....	2,158 54
Received from steward's sales, clothing manufacturing department	4,389 69
Received from banking house, L. C. Partridge, interest	178 25
Received from cash refunded.....	265 00
Received from State Comptroller, special funds, chapter 364, Laws of 1900.....	9,187 21
Received from State Comptroller, special funds, chapter 322, Laws of 1901.....	11,764 54
Received from State Comptroller, special account for payment of voucher deferred by the failure of the hospital depositary in April, 1901.....	18,136 03
Total receipts	<u>\$424,445 90</u>

Disbursements

To pay vouchers under estimates as follows:

Estimate No. 1, salaries.....	\$20,289 89
Estimate No. 2, wages.....	129,313 94
Estimate No. 3, Provisions and stores.....	110,292 97
Estimate No. 4, ordinary repairs.....	8,262 58
Estimate No. 5, farm and grounds.....	11,297 60
Estimate No. 6, clothing.....	22,834 04
Estimate No. 7, furniture and bedding.....	8,111 92
Estimate No. 8, books and stationery.....	2,692 28
Estimate No. 9, fuel and light.....	29,733 82
Estimate No. 10, medical supplies.....	3,016 52
Estimate No. 11, miscellaneous expenses.....	10,315 08
Estimate No. 12, transportation of patients.....	4,589 85

Total disbursements under estimate 1-12....	\$360,750 50
---	--------------

To pay State Treasurer sundry receipts under chapter 580, Laws 1899, as amended by chapter 326, Laws 1900.....	18,854 35
--	-----------

To pay special funds under chapter 364, Laws 1900	9,187 21
---	----------

To pay special funds under chapter 322, Laws 1901	11,764 54
---	-----------

To pay voucher for March, 1901, payment of which was deferred by the failure of the hospital depositary, the banking house of Le Roy C. Partridge, Ovid, N. Y.....	18,136 03
--	-----------

Sundry receipts from April 1, 1901, to date of failure of the hospital depositary April 25, 1901, including balance on hand as of April 1, 1901	2,885 59
---	----------

Balance on hand, including cash on hand advanced to pay transportation of patients and with the Ithaca Trust Company, of Ithaca, N. Y., the hospital depositary.....	2,867 68
--	----------

Total	\$424,445 90
-------------	--------------

Classification of Balances

Balance on hand to salaries.....	\$27 75
Balance on hand to wages.....	160 45
Balance on hand to supplies.....	2,679 48
Total	<u>\$2,867 68</u>

In connection with and as an addition to the foregoing report it is desired to say that of the amounts entered herein as receipts the balance of \$1,661.09 to the clothing manufacturing account and the further amount of \$4,389.69, or a total of \$6,050.78, was in December last by direction of the Commission in Lunacy transferred to the general fund or maintenance account and the clothing manufacturing account closed.

On April 25, 1901, the banking house of LeRoy C. Partridge of Ovid, N. Y., which had been the hospital depository for a number of years, closed its doors, the owners thereof having made a general assignment for the benefit of their creditors. This assignment was of considerable importance to this department of the hospital, as it tied up a large portion of the funds furnished to the hospital for the payment of expenses for the month of March.

A reference to treasurer's report for the month of March, as originally made and filed, will show that the receipts for the month of March were \$36,851.79, and that the disbursements amounted to \$36,596.72, and had these payments been actually made, the balance on hand as of the first of April would have been as entered, \$255.07. As the work of the treasurer's office, especially that pertaining to the vouchers, is done entirely from the vouchers, only such vouchers as were called for by the claimant in person had been paid. This, however, includes the greater part of the two vouchers for officers' salaries and employees' wages. Following the custom of compiling the treasurer's monthly report from the vouchers, and of sending this report when completed and mailing the vouchers with check on the depository to the claimants, it is considered that such report

then shows the completed condition of the month's business. This routine was followed and the month's report completed and sent forward to the Commission in Lunacy and Comptroller showing the small balance of \$255.07, and just as the vouchers and checks were made ready for the mail we were confronted with the information that the bank had assigned. With this information before us it was useless to mail vouchers and checks. The result would have been the same had it been possible to have mailed vouchers and checks earlier, as checks could not have reached the claimants in time to have them presented through proper channels and payment made by the bank before its failure. Had it been possible to have so mailed the checks, even though they had just reached their destination, the report would have shown the completed condition and the amounts represented by the vouchers would still be claims against the hospital.

An examination of the books of the hospital was made by a representative from the Comptroller's office within a few days after the failure and found to be correct.

At the time of the failure there had been issued checks for \$141.67 for salaries, \$719.67 for wages and \$18,917.66 for supplies; checks for the first two amounts had all been delivered, while the greater part of the last named, while just completed, had not been delivered. An examination of the accounts and an investigation in each case where checks had been issued and delivered, made by the hospital attorney, resulted in the decision that of the amounts mentioned above, \$141.67 for salaries, \$262.67 for wages and \$17,731.69 for supplies, were good, valid and subsisting claims against the State, there being no fault, misconduct or negligence on the part of the payees, making a total claim of \$18,136.03. Estimates were made to the Commission for this sum, and after the approval the amount was remitted to us and the claims paid. Of the checks issued and outstanding at the time of the failure there remains \$457 for wages and \$36.08 for supplies that in the opinion of the attorney the negligence of the holder in presenting was sufficient to discharge the hospital from any claim.

The sum thus advanced of \$18,136.03 with the amount that would have been the balance of \$255.07 as of April 1st and the further sundry receipts during the month of April of \$2,630.52 or a total of \$21,021.62 is the claim of the hospital against the bank for which a properly verified claim has been filed.

Against this sum there are some small offsets, consisting of an overdraft of \$45 for the special fund account occasioned by the payment by the bank of checks prior to the receipt of special fund moneys from the Comptroller, and the sum of \$147.55, the amount of two checks for supplies for the month of April that were issued in advance of the regular audit, and the additional sum of \$77.92 paid by the bank for steward's advance orders that had been paid by the bank and carried as cash item, making a total offset or counterclaim of \$270.47.

Since the assignment was made some of the creditors made an application for the appointment of a referee in bankruptcy, and the affairs of the bank are now in the hands of three trustees; the settlement of the same is proceeding slowly, and at the present time it is impossible to predict what the outcome will be.

Respectfully submitted.

HENRY PETERSON

Treasurer

REPORT OF STEWARD

WM. AUSTIN MACY, Esq., *Medical Superintendent, etc.*

Dear Sir.—I respectfully submit herewith the report of the steward's department for the year ending September 30, 1901.

Respectfully

M. J. GILBERT

Steward

The following report of the farm and garden products, stock on hand, articles manufactured and the classification and summary of expenditures for maintenance for the year ending September 30, 1901, is respectfully submitted:

FARM PRODUCTS

Alfalfa hay, 35 tons, at \$5.....	\$175 00
Alfalfa, green, 60 tons, at \$2.....	120 00
Apples, 403 bushels, at 40 cents.....	161 20
Beef, 14,525 pounds, at 5.9934 cents.....	870 54
Corn, sweet, 1,295 bushels, at 40 cents.....	518 00
Corn for silo, 630 tons, at \$3.50.....	2,205 00
Cornstalks, 15 tons, at \$3.....	45 00
Corn fodder, 100 tons, at \$3.25.....	325 00
Currants, 2,072 quarts, at 4 cents.....	82 88
Chickens, 708 pounds, at 9 cents.....	63 72
Calves, alive, 79.....	137 00
Ducks, 237 pounds, at 10 cents.....	23 70
Eggs, 1,209 dozen, at 14.68 cents.....	177 58
Grapes, 5,456 pounds, at 1 cent.....	54 56
Hay, 279 tons, at \$10.....	2,790 00
Hides, cow, 1,449 pounds, at 6.5 cents.....	94 18
Hides, bull, 150 pounds, at 5.5 cents.....	8 25
Hides, veal, 9.....	10 50
Lambs, 620 pounds, at 6.57 cents.....	40 75
Mutton, 1,490 pounds, at 6.75 cents.....	100 58
Milk, 397,090 quarts, at 2.5 cents.....	9,927 25
Milk, 77,574 quarts, at 2 cents.....	1,551 48

Pork, 33,527 pounds, at 5.5 cents.....	\$1,843 99
Pigs, 378 pounds, at 4 cents.....	15 12
Pigs, alive, 32.....	68 50
Peaches, 14½ bushels, at \$1.....	14 50
Pears, 26½ bushels, at 50 cents.....	13 25
Pelts, lamb, 8.....	3 40
Rye, 348 bushels, at 55 cents.....	191 40
Raspberries, 1,192 quarts, at 6 cents.....	71 52
Strawberries, 1,256 quarts, at 7 cents.....	87 92
Straw, wheat, 40 tons, at \$4.....	160 00
Straw, oats, 25 tons, at \$4.....	100 00
Turkey, 108 pounds, at 12 cents.....	12 96

ESTIMATED—NOT HARVESTED

Apples, 1,400 bushels, at 40 cents.....	560 00
Buckwheat, 150 bushels, at 40 cents.....	60 00
Corn, late, ears, 600 bushels, at 30 cents.....	180 00
Mangel wurzels, 6,000 bushels, at 20 cents.....	1,200 00
Oats, 2,100 bushels, at 35 cents.....	735 00
Potatoes, 3,000 bushels, at 50 cents.....	1,500 00
Wheat, 2,100 bushels, at 72 cents.....	1,512 00
<hr/>	
Total of farm products.....	\$27,811 73

GARDEN PRODUCTS—HARVESTED

Asparagus, 241 bushels, at 30 cents.....	72 30
Beans, string, 105 bushels, at 50 cents.....	52 50
Beans, Lima, 75 bushels, at \$1.....	75 00
Beets, 167 bushels, at 25 cents.....	41 75
Carrots, 7 bushels, at 30 cents.....	2 10
Cabbage, 658 heads, at 3 cents.....	19 74
Cucumbers, 129 bushels, at 50 cents.....	64 50
Corn, sweet, 500 bushels, at 25 cents.....	125 00
Lettuce, 1,176 bushels, at 40 cents.....	470 40

Onions, 35 bushels, at 50 cents.....	\$17 50
Onions, green, 332 bushels, at 45 cents.....	149 40
Potatoes, 66 bushels, at 75 cents.....	49 50
Potatoes, 68 bushels, at 50 cents.....	34 00
Peppers, 15 bunches, at 75 cents.....	11 25
Parsley, 75 bunches, at 3 cents.....	2 25
Rhubarb, 211 barrels, at 50 cents.....	105 50
Radishes, 106 bushels, at 50 cents.....	53 00
Spinach, 76 bushels; at 20 cents.....	15 20
Swiss chard, 232 barrels, at 50 cents.....	116 00
Salsify, 37 barrels, at 50 cents.....	18 50
Sage, 50 bunches, at 15 cents.....	7 50
Tomatoes, 757 bushels, at 25 cents.....	189 25

ESTIMATED—NOT HARVESTED.

Beans, Lima, 75 bushels, at \$1.....	75 00
Beets, 800 bushels, at 25 cents.....	200 00
Carrots, 200 bushels, at 30 cents.....	60 00
Cabbage, 25,000 heads, at 3 cents.....	750 00
Celery, 12,000 bunches, at 3 cents.....	360 00
Corn, pop, 35 bushels, at 75 cents.....	26 25
Cauliflower, 1,500 heads, at 5 cents.....	75 00
Onions, 150 bushels, at 50 cents.....	75 00
Peppers, 50 bunches, at 75 cents.....	37 50
Parsley, 20 bunches, at 3 cents.....	60
Swiss chard, 110 barrels, at 50 cents.....	55 00
Salsify, 188 barrels, at 50 cents.....	94 00
Tomatoes, 763 bushels, at 25 cents.....	190 75
Turnips, 1,000 bushels, at 25 cents.....	250 00
Wormwood, 50 bunches, at 10 cents.....	5 00
Credit to farm account, rentals, etc.....	127 00

Total farm and garden products..... \$31,884 97

Debit

Amount charged to farm and grounds.....	\$11,049 22
Farm wages and board	5,544 00
All articles of produce used as food for cows, hogs, sheep, fowls, etc.....	4,727 75
Net profit to balance.....	10,564 00
	<hr/>
	\$31,884 97
	<hr/>

FARM STOCK ON HAND SEPTEMBER 30, 1901

Horses	37
Colts	9
Mule	1
Cows	162
Heifers, 2-year old	8
Heifers, 1-year old	26
Heifer calves	12
Bulls	5
Boars	5
Hogs, fat	115
Shoats	30
Pigs	22
Breeding sows	35
Sheep	24
Lambs	11
Turkeys	60
Geese	7
Ducks	30
Fowls	260

ARTICLES MADE IN MATRON'S DEPARTMENT

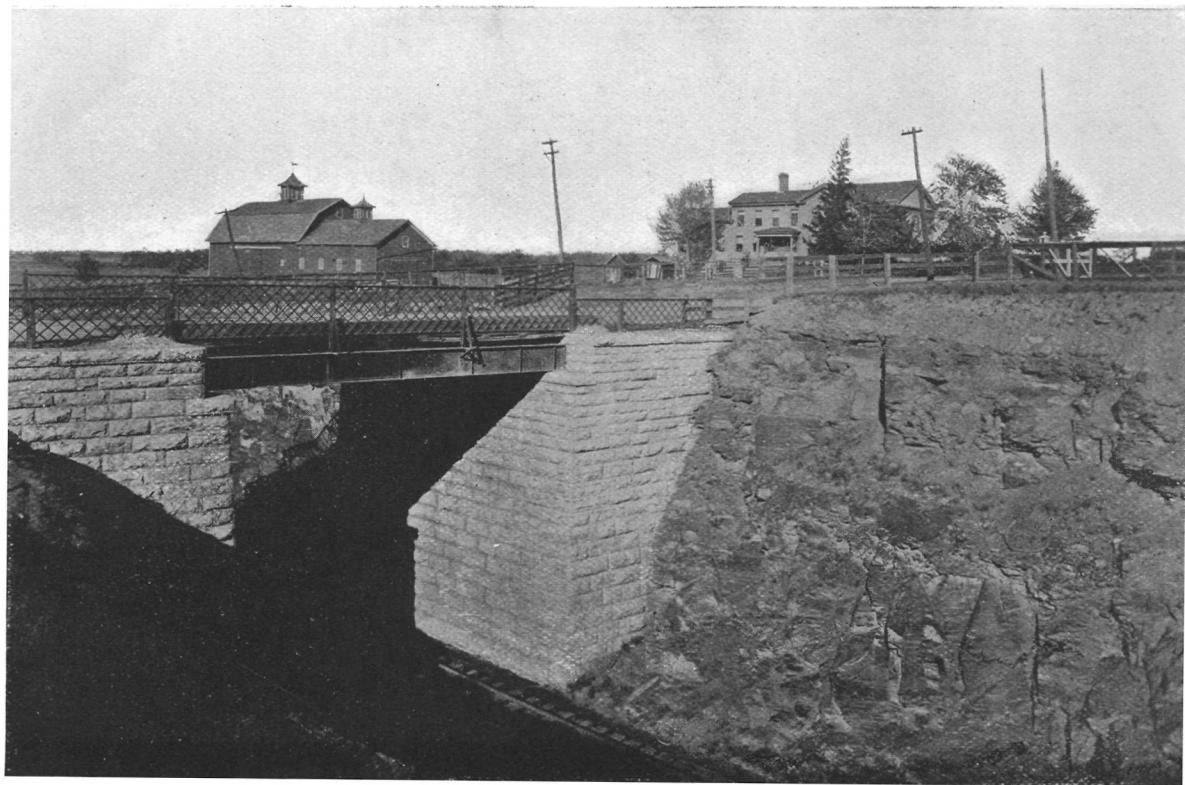
Aprons, patients'	4,362
Aprons, cooks'	770
Bibs	261
Bath robes	43

Bureau covers	217
Bed protectors	8
Blankets, quilted	18
Basket-ball suits	21
Chimeses	1,188
Caps, cooks'	68
Caps, nurses'	385
Curtains, Holland	688
Curtains, cheesecloth	88
Dresses, gingham	1,534
Dresses, calico	953
Dresses, strong gingham	75
Dresses, quilted	26
Dresses, cashmere	24
Dressing jackets	14
Drawers, cotton	377
Drawers, cotton flannel	424
Hash covers	27
Hose, knit	38
Hose bags	41
Laundry bags	36
Laundry squares	43
Mattress ticks	249
Mattresses, knitted	48
Nightgowns.	93
Pillow shams	57
Pillowcases, bleached	133
Pillowcases, unbleached	1,381
Pillowticks.	33
Skirts, cotton	423
Skirts, cotton flannel	311
Skirts, balbriggan	98
Shirt waists	10
Splashers.	30
Sheets, bleached	104
Sheets, unbleached	3,746

Tablecloths, patients'	587
Tablecloths, center	33
Table spreads	45
Napkins.	168
Towels, patients'	13,744
Towels, dish	1,493
Towels, roller	118
Towels, center	178
Suits, union	12
Shrouds.	129
Shroud shirts	5
Vests, cotton flannel.	433
In addition to the foregoing there have been mended during the year the following number of pieces of clothing and bedding.	128,975

ARTICLES MADE IN THE TAILORING DEPARTMENT

Bows.	33
Coats.	1,307
Coats, kitchen workers'	15
Coats, dining-room workers'	21
Caps, men's, winter.	180
Hatbands.	130
Mittens, cloth, pairs.	131
Overshirts.	216
Overalls.	141
Overcoats.	99
Pants.	1,859
Pants, kitchen workers'	34
Pants, dining-room workers'	117
Straight suits	136
Suspenders, canvas	1,537
Shirts.	3,425
Vests.	1,225



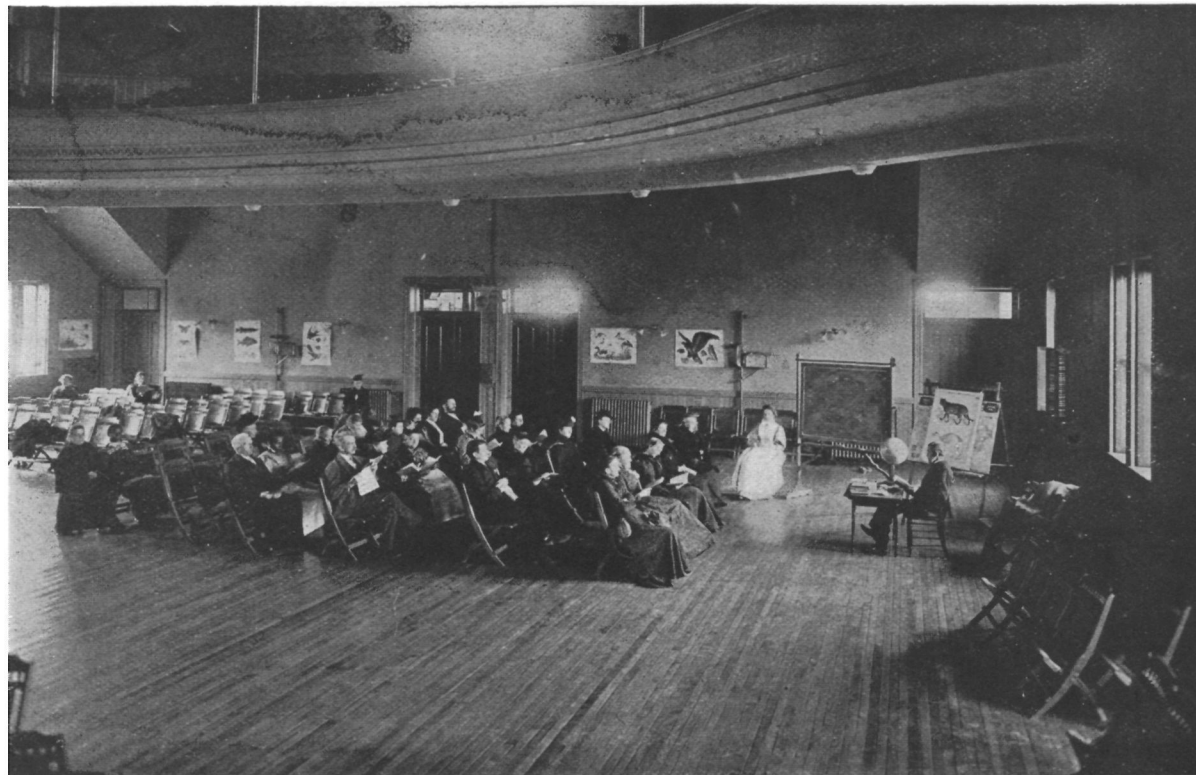
WILLARD STATE HOSPITAL.—VIEW OF "HILLSIDE" AT LEHIGH VALLEY RAILROAD CROSSING.



WILLARD STATE HOSPITAL.—SEWING ROOM.



WILLARD STATE HOSPITAL.—SHOEMAKER'S SHOP.



WILLARD STATE HOSPITAL.—SCHOOL FOR PATIENTS.



WILLARD STATE HOSPITAL.—FIRE COMPANY AND FIRE ENGINE HOUSE.

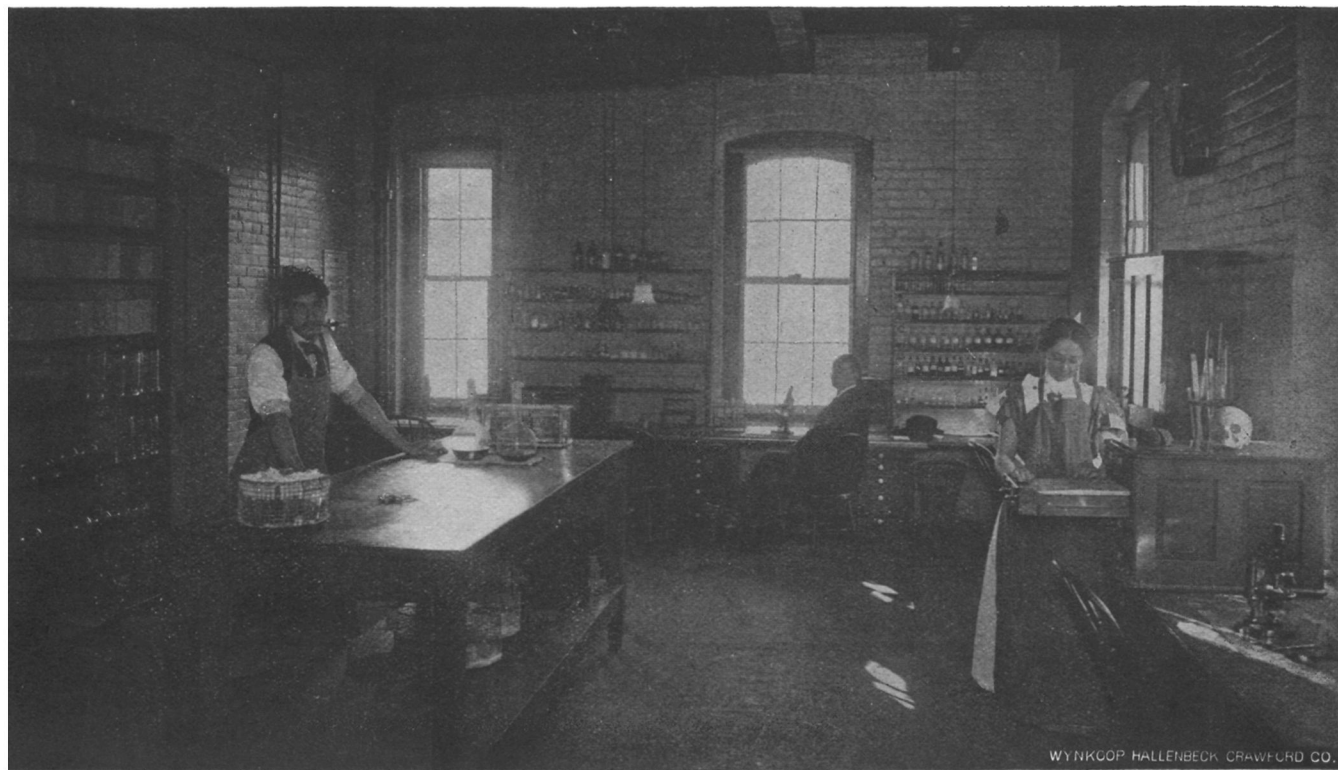


WILLARD STATE HOSPITAL.—LAKE VIEW IN FRONT OF HOSPITAL.



WYNKOOP HALLENBECK CRAWFORD CO.

WILLARD STATE HOSPITAL.—INTERIOR OF SHOE-SHOP.



WYNKOP HALLENBECK CRAWFORD CO.

WILLARD STATE HOSPITAL.—INTERIOR OF LABORATORY.

MADE IN SHOE SHOP

Brogans, pairs	221
Shoes, fine, pairs.....	93
Slippers, pairs	781

ARTICLES MADE AND REPAIRED IN SHOE SHOP

Awnings, new	15
Awnings repaired	12
Curtains, carriage, repaired.....	5
Cushions, new	2
Carriage mud-wings, covered.....	4
Cushions, upholstered	10
Chairs, upholstered	23
chair cushions made, new.....	10
Clips in traces.....	24
Cockeyes in traces.....	18
Check lines, pairs.....	2
Cross lines, pairs.....	2
Dashboards, covered	2
Express wagons, covered.....	2
Hame straps, new.....	50
Horse collars faced, new	15
Horse flynets, repaired.....	12
Halters, new	10
Hitching straps, new	8
Laundry sacks repaired.....	43
Mattresses made over.....	1,610
Mattresses, new	10
Martingales, new	16
Neckyoke centers	4
Pillows, made over.....	869
Rugs, ingrain, new.....	75
Team harness, double, new.....	1
Team bridles.....	4

Shoes, pairs, new.....	540
Snaps in harness.....	78
Settees repaired.....	3

All boots, shoes and slippers repaired.

All heavy and light harness repaired.

ARTICLES MADE IN BROOM SHOP

Brooms, house.....	2,703
Brooms, brush	207
Brooms, stable.....	6
Baskets, waste.....	69
Basket, small square	1
Baskets repaired.....	19
Baskets, large square clothes.....	14
Baskets, bread.....	2
Baskets, dressing.....	2
Basket, tool	1
Basket, market	1
Baskets, 18x31x4 inches.....	2
Brushes, horse.....	17
Brushes, scrub.....	434
Brushes, hair.....	55
Brushes, bathing.....	138
Brushes, wall.....	5
Brushes, shoe.....	6
Brushes, cow.....	26
Brushes, round.....	6
Chairs caned	157
Clothes hampers	15
Door mats.....	60
Settees, reseated.....	3

ARTICLES MADE IN THE TIN SHOP

Basins, 2-quart	2
Basins, wash	49
Boiler, 4x tin, copper bottom.....	1
Boxes, food, covered.....	33
Boxes, application cards, covered.....	3
Box, bread, covered	1
Can, galvanized, 60-gallon.....	1
Cans, catchup	6
Cans, soup	6
Cans, milk, 20-quart.....	5
Cans, syrup	2
Cans, oil, 2-gallon.....	2
Chambers, 2x tin, copper bottom.....	78
Coolers, water, made over.....	11
Covers, kettle	15
Cups, copper, bird-feed.....	3
Cups, small, drinking.....	168
Colanders, large, 4x tin	2
Carnation supports, wire.....	125
Dampers, pipe	3
Dippers, 2x tin, 1-pint.....	28
Dippers, 4x tin, 1 quart.....	24
Dippers, 4x tin, 2-quart.....	12
Dippers, 4x tin, 4-quart.....	2
Dippers, 4x tin (strainer).....	6
Elbows	11
Exhaust head, galvanized iron.....	1
Fumigators	3
Finials, galvanized iron	2
Hood and stack for engine house.....	1
Holder, spit cup.....	18
Hods, coal	12
Kettles, tea, 4x tin, copper bottoms.....	2
Kettle, 4x tin, 12-quart.....	1
Kettle, copper	1

Lining bathroom, galvanized iron.....	1
Lining flushing tanks, copper.....	8
Pail, 4x tin, 2-quart, covered.....	1
Pails, 4x tin, 4-quart.....	2
Pails, 4x tin, 3-quart, covered.....	3
Pails, 1x tin, covered, 6-quart.....	6
Pail, cream, 4x tin, 5-gallon.....	1
Pails, 4x tin, hoop on bottom.....	54
Pails, No. 24 galvanized, hoop on bottom.....	76
Pans, 4x tin, 6-quart.....	67
Pans, 4x tin, 10-quart.....	48
Pans, 4x tin, 21-quart.....	54
Pans, 4x tin, 15-quart.....	14
Pans, dripping, No. 22, R. G. iron.....	13
Pans, bread, No. 24, planished.....	48
Pans, dust, 3x tin.....	72
Pans, cake, 4x tin.....	13
Pans, roasting, covered.....	2
Pans, 4x tin, 20-gallon, iron staps on bottom.....	3
Pitchers, 4x tin.....	30
Pipe joints.....	39
Potato strainers, 4x tin.....	15
Pipe flashings, galvanized.....	7
Pots, coffee, 4x tin.....	6
Pots, tea, 4x tin.....	7
Refrigerator linings.....	3
Steam sterilizer, copper bottom.....	1
Sprinkler, galvanized, 12-quart.....	1
Sprinkler heads.....	4
Strainer head for water pipe.....	1
Skimmers.....	8
Spring bottom oilers.....	6
Spark arrestors for engine.....	2
Sieves, flour.....	6
Sprays for coffee urns.....	2
Safes, floor, tin.....	3

Squirrel cage	1
Slop jars, galvanized.....	6
Tins, bread	34
Tins, pie	207
Tins, compartment	7
Tins, diet	18
Torches, plumbers and steam fitter's.....	9
Vegetable spoons	24

MAINTENANCE

	Total cost	Weekly per capita
Officers' salaries	\$20,289 89	\$0.172
Wages	129,313 94	1.102
Provisions and stores	110,292 97	.940
Ordinary repairs	8,262 58	.071
Farm and grounds.....	11,297 60	.096
Clothing	22,834 04	.181
Furniture and bedding.....	8,111 92	.069
Books and stationery.....	2,692 28	.023
Fuel and light.....	29,733 82	.254
Medical supplies	3,016 52	.025
Miscellaneous expenses	10,315 09	.088
Transportation of patients.....	4,589 85	.039

Total estimates 1-12 inclusive as

above	\$360,750 50	\$3.060
-------------	--------------	---------

STATISTICAL TABLES

TABLE No. 1

Showing movement of population for the year ending September 30,
1901

	Men	Women	Total
Remaining October 1, 1901.....	1,122	1,144	2,266
Admitted during year ending Sept. 30, 1901 ...	155	122	277
On original commitments:			
From residences	140	108	248
By transfers from county houses.....	7	8	15
By transfers from other institutions for insane.	8	6	14
Total number under treatment during year.	1,277	1,266	2,543
Daily average population	1,119	1,137	2,256
Capacity of institution	1,136	1,169	2,305
Discharged during the year:			
As recovered.....	27	27	54
As improved.....	21	36	57
As unimproved.....	15	7	22
As not insane	1	.....	1
Died	83	90	173
Whole number discharged during the year.....	147	160	307
Remaining October 1, 1901	1,130	1,106	2,236

TABLE No. 2

October 1, 1900, to September 30, 1901

Date of opening.....	1869
Total acreage of grounds and buildings.....	1,107
Value of real estate, including buildings.....	\$1,396,243 50
Value of personal property.....	211,353,51
Acreage under cultivation.....	650

Receipts during year, maintenance fund:

Balance on hand October 1, 1900.	\$442,21
From State Treasurer for maintenance on estimates	
1 to 12 inclusive	335,110 00
From private patients.....	448 14
From reimbursing patients.	20,705 20
From all other sources	8,652 87

Total receipts for maintenance.....	\$385,358 12
-------------------------------------	--------------

Total receipts from State Commission in Lunacy for extraordinary improvements.....	\$20,951 75
---	-------------

Disbursements during the year for maintenance:

Estimate No. 1. For officers' salaries.....	\$20,289 89
Estimate No. 2. For wages.....	129,313 94
Estimate No. 3. For provisions and stores.....	110,292 97
Estimate No. 4. For ordinary repairs.....	8,262 58
Estimate No. 5. For farm and grounds.....	11,297 60
Estimate No. 6. For clothing	22,834 04
Estimate No. 7. For furnitrr and bedding.....	8,111 92
Estimate No. 8. For books and stationery	2,692 28
Estimate No. 9. For fuel and light.....	29,733 82
Estimate No. 10. For medical supplies	3,016 52
Estimate No. 11. For miscellaneous expenses....	10,315 09
Estimate No. 12. For transportation.....	4,589 85

Total disbursements, estimates 1 to 12 in- clusive.....	\$360,750 50
--	--------------

Table No. 2—(Concluded)

Total disbursements during year for extraordinary improvements under apportionments by State Commission in Lunacy	\$20,951 75
Remitted to State Treasurer, sundry receipts, Chap. 580, Laws 1899.....	18,854 35
Balances October 1, 1901:	
General maintenance fund.....	2,867 68
Weekly per capita cost on daily average number of patients, estimates 1 to 12 inclusive	3 06
Maximum rate of wages paid attendants:	
Men.....	33 per month
Women....	28 per month
Minimum rate of wages paid attendants:	
Men.....	20 per month
Women.....	14 per month
Proportion of day attendants to average daily population	1 to 11.06
Proportion of night attendants to average daily population.....	1 to 64.46
Percentage of daily patient population engaged in some kind of useful occupation	51.52
Estimated value of farm and garden products during year.....	\$31,757 97
Estimated value of articles made or manufactured by patients during year	20,387 17
Received from State Treasurer for March maintenance, account of bank failure	18,136 03
Disbursements for deferred March vouchers, account of bank failure.....	18,136 03

The above balance of \$2,885.59 is balance in the banking house of L. C. Partridge at the time of its assignment on April 25, as shown by the check book of the treasurer, and consists of the balance on hand as of April 1, had all checks been paid, and the receipts of the month from reimbursing patients added to the amount of unpaid checks of \$18,136.03, making a total of \$21,021.62 as the claim of the hospital against the bank.

TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDISPOSITION			Unascertained
	Men	Women	Total	Men	Women	Total	
Moral:							
Adverse conditions (such as loss of friends, business troubles, etc.)	7	16	23	3	6	9	4
Mental strain, worry and overwork (not included in above)	6	8	14	.....	2	2	....
Religious excitement	1	3	4	.....	2	2	1
Love affairs (including seduction)	.....	2	2	.....	1	1	....
Fright and nervous shock	1	1	2	.....	1	1	....
Physical:							
Intemperance	19	2	21	....	6	6	8
Sexual excess	2	.....	2	.....	1	1	....
Venereal diseases	7	1	8	2	.....	2	1
Masturbation	8	1	9	3	.....	3	3
Sunstroke	2	1	3	2	.....	2	....
Accident or injury	4	.....	4	.....	.....	.....	.....
Pregnancy	.....	5	5	.....	.....	.....	.....
Parturition and puerperium	.....	1	1	.....	1	1	...
Change of life	.....	17	17	.....	5	5	....
Fevers	2	1	3	.....	.....	.....	....
Privation and overwork	4	4	8	.....	.....	.....	....
Epilepsy	2	2	4	1	2	3	....
Diseases of skull and brain	5	.....	5	1	.....	1	....
Old age	13	4	17	1	3	4	4
Exophthalmic goitre	.....	1	1	.....	.....	.....	....
Epidemic influenza	5	3	8	3	2	5	....
Abuse of drugs	3	3	6	.....	.....	.....	....
Loss of special sense	1	.....	1	.....	.....	.....	....
All other bodily disorders and ill health	5	13	18	1	6	7	....

Table No. 3—(Concluded)

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDISPOSITION			Unascertained
	Men	Women	Total	Men	Women	Total	
Heredity.....	19	23	42	19	23	42	....
Congenital defect	2	1	3	.....	.....	.....	.....
Unascertained	36	9	45	5	2	7	12
Not insane	1	.....	1	.....	.....	.....	.....
Total	155	122	277	41	63	104	33

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1901, and since October 1, 1888

FORM	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Admitted	Recovered	Died	Admitted	Recovered	Died
Mania, acute delirious ...	1	1	1	4	1	3
Mania, acute.....	32	16	6	556	245	72
Mania, recurrent	2	.....	.....	71	24	13
Mania, chronic.....	32	2	23	554	25	289
Melancholia, acute.....	59	34	9	843	309	166
Melancholia, simple.....	.....	.....	1	.....	.....	1
Melancholia, chronic.....	81	1	29	618	32	157
Alternating (circular) insanity.....	1	.....	.....	4	.....	.....
General paralysis.....	17	.....	10	164	.....	133
Dementia, primary	2	.....	4	9	.....	4
Dementia, terminal	49	.....	78	1,677	.....	975
Epilepsy with insanity.....	.....	.....	10	183	.....	166
Imbecility with maniacal attacks.....	.....	.....	2	99	.....	20
Idiocy .....	.....	.....	.....	37	.....	15
Not insane*	1	.....	.....	19	.....	.....
Total	277	54	173	4,838	636	2,014

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 6

Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month	6	7	13	1	1	2	114	93	207	3	2	5
One to three months	6	8	14	7	2	9	71	87	158	55	21	76
Three to six months	3	6	9	9	10	19	48	55	103	115	91	206
Six to nine months	1	3	4	5	2	7	16	19	35	52	60	112
Nine months to one year				1	5	6	7	11	18	35	52	87
One year to eighteen months	1	2	3	3	5	8	14	9	23	40	41	81
Eighteen months to two years				1	1	2	10	9	19	8	12	20
Two to three years		1	1		1	1	11	9	20	10	20	30
Three to four years	3		3				6	2	8	2	6	8
Four to five years								3	3	3	1	4
Five to ten years							4	6	10	3	3	6
Ten to twenty years							2	2	4		1	1
Not insane							2		2	2		2
Unascertained	7		7				23	5	27			
Total	27	27	54	27	27	54	328	310	638	328	310	638

TABLE No. 7

Showing the causes of death of patients who died during the current year and since October 1, 1888

CAUSES OF DEATH	YEAR ENDING SEPTEMBER 30 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Specific infections diseases :						
Typhoid fever.....		1	1	3	6	9
Measles	2		2	2		2
Influenza				1	5	6
Erysipelas.....	1		1	5	9	14
Septicemia and pyemia.....		1	1	8	6	14
Dysentery				9	11	20
Tuberculosis	16	16	32	168	247	415
Constitutional diseases :						
Rheumatism (or rheumatic affections)					1	1
Diabetes mellitus and diabetes insipidus				1	1	2
Scurvey, purpura and hæmophilia.....					1	1
Diseases of the digestive system:						
Mouth, salivary glands, pharynx, tonsils and œsophagus				3		3
Diseases of the stomach				2	3	5
Diseases of the intestines..	1	7	8	40	66	106
Diseases of the liver	1	1	2	4	3	7
Diseases of the peritoneum.....		3	3	11	12	23
Diseases of the respiratory system :						
Diseases of the bronchi.....				5	1	6
Diseases of the lungs.....	17	25	42	149	157	306
Diseases of the pleura.....				2	2	4
Diseases of the circulatory system :						
Diseases of the pericardium.....				2	2	4
Diseases of the heart.....	16	17	33	126	125	351
Aneurism.....				2	1	3
Diseases of the blood and ductless glands :						
Anemia, pernicious anemia and leukæmia				1	4	5
Exophthalmic goitre.....		1	1		1	1
Diseases of the genito-urinary system.....	8	3	11	84	54	138
Diseases of the nervous system :						
Diseases of the spinal cord..	1		1	5		5
Diseases of the meninges ..	1	1	2	6	7	13

Table No. 7—(Concluded)

CAUSES OF DEATH	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Organic diseases of the brain (tumor, abscess, embolism, thrombosis, hemorrhage and other gross lesions)	6	6	12	62	92	154
Epilepsy		1	1	45	38	83
Mental diseases :						
Exhaustion of acute mental disease	1	.....	1	67	71	138
Exhaustion of chronic mental disease						
General paralysis of the insane	6	2	8	106	22	128
The intoxications; heat-stroke; obesity :						
Heat-stroke .....				.....	1	1
Debility of old age				26	43	69
Accident	1	.....	1	8	3	11
Suicide	1	1	2	5	3	8
Surgical and gynecological diseases and diseases of the skin.						
Malignant new growths of cancer	1	.....	1	7	4	11
	3	4	7	14	33	47
Total	83	90	173	989	1,035	2,014

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Paternal branch.....	12	11	23	156	180	336
Maternal branch.....	13	19	32	212	262	474
Paternal and maternal branches.....		2	2	20	47	67
Collateral branches.....	26	24	50	272	265	537
No hereditary tendency..	74	60	134	883	735	1,618
Unascertained.....	30	6	36	893	913	1,806
Total.....	155	122	277	2,436	2,402	4,838

TABLE No. 9

Showing civil condition of patients admitted during the current year and since October 1, 1888

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Single.....	61	38	99	1,213	903	2,116
Married.....	69	60	129	918	1,025	1,943
Widowed...	17	21	38	237	427	664
Divorced.....	4	3	7	27	17	44
Unascertained.....	4	.....	4	41	30	71
Total.....	155	122	277	2,436	2,402	4,838

TABLE No. 10

Showing degree of education of patients admitted during the current year and since October 1, 1888

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Collegiate	5	2	7	44	13	57
Academic	10	9	19	144	146	290
Common school.....	116	97	218	1,498	1,416	2,914
Read and write	1	3	4	81	43	124
Read only.....	3	4	7	107	143	250
No education	5	7	12	165	155	320
Unascertained	15	.....	15	397	486	883
Total	155	122	277	2,436	2,402	4,838

TABLE No. 11

Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month	3	6	9	8	6	14	56	51	107	79	53	132
One to three months	4	5	9	8	5	13	53	55	108	101	80	181
Three to six months	8	5	13	1	4	5	60	38	98	78	74	152
Six to nine months	5	3	8	3	3	6	59	39	98	46	57	103
Nine months to one year	2	1	3	2	2	4	25	25	50	50	43	93
One year to eighteen months ..	6	3	9	5	8	13	64	48	112	78	75	153
Eighteen months to two years ..	2	2	4	3	1	4	24	24	48	52	52	104
Two to three years	9	3	12	8	1	9	101	79	180	76	65	141
Three to four years	11	6	17	6	15	21	65	73	138	78	85	163
Four to six years	9	11	20	9	13	22	76	87	163	75	86	161
Six to ten years	5	7	12	14	12	26	77	101	178	91	93	184
Ten to twenty years	2	8	10	6	10	16	84	121	205	122	181	303
Twenty years and over	6	6	12	10	10	20	53	73	126	53	91	144
Unascertained	11	24	35	.....	.....	.....	182	221	403	.....	.....	.....
Total	83	90	173	83	90	173	979	1,035	2,014	979	1,035	2,014
Average duration of insane life (giving years and tenths)				6.06	7.0	6.8	.....	.....	.....	5.2	6.6	5.9



WILLARD STATE HOSPITAL.—BASKET, MAT AND BRUSH SHOP.



WILLARD STATE HOSPITAL.—LAUNDRY.

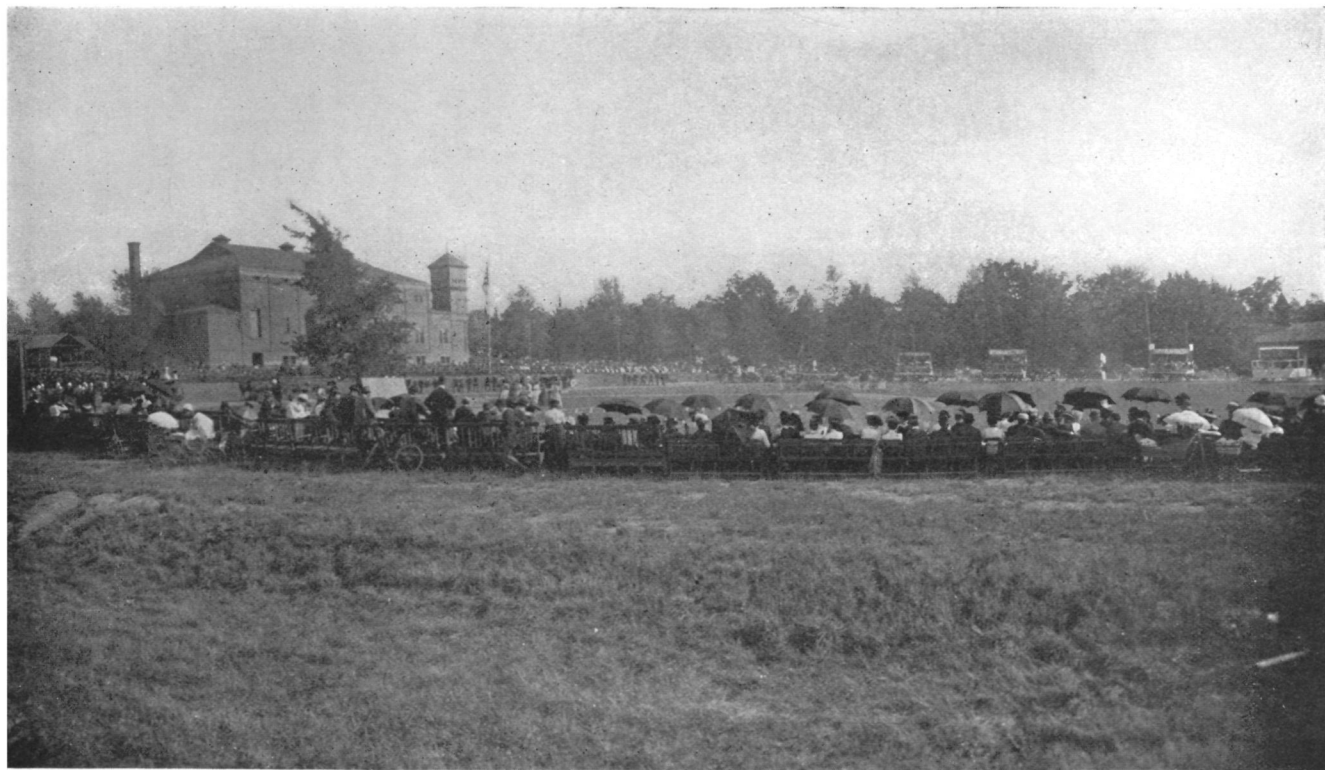


WYLLIOTT HALL, ELBECK, CRAWFORD CO.

WILLARD STATE HOSPITAL.—STOREROOM.



WILLARD STATE HOSPITAL.—PARADE OF WORKING PATIENTS ON FIELD DAY.



WILLARD STATE HOSPITAL.—FIELD DAY.



WYNKOP HALLENBECK CRAWFORD CO.

WILLARD STATE HOSPITAL—FALL PLOWING.

TABLE No. 12

Showing ages of those admitted during the current year and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 5 to 10 years					1	1
From 10 to 15 years				10	4	14
From 15 to 20 years	9	3	12	84	45	129
From 20 to 25 years	5	10	15	180	125	305
From 25 to 30 years	8	15	23	205	197	402
From 30 to 35 years	14	8	22	235	231	466
From 35 to 40 years	10	14	24	262	257	519
From 40 to 50 years	39	31	70	497	584	1,081
From 50 to 60 years	29	18	47	434	442	876
From 60 to 70 years	24	9	33	283	292	575
From 70 to 80 years	15	11	26	195	183	378
From 80 to 90 years	2	3	5	49	40	89
Unascertained				2	1	3
Total	155	122	277	2,436	2,402	4,838

TABLE No. 13

Showing ages of those discharged recovered during the current year and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 5 to 10 years					1	1
From 10 to 20 years	1		1	23	18	41
From 20 to 30 years	5	7	12	85	90	175
From 30 to 40 years	4	8	12	67	93	160
From 40 to 50 years	6	9	15	70	64	134
From 50 to 60 years	6	1	7	57	30	87
From 60 to 70 years	5	2	7	21	11	32
From 70 to 80 years				3	3	6
Total	27	27	54	326	310	636

TABLE No. 14

Showing ages of patients who died during the current year and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 15 to 20 years.....	2	2	4	6	3	9
From 20 to 25 years.....	2	1	3	22	14	36
From 25 to 30 years.....	4	2	6	40	32	72
From 30 to 35 years.....	1	1	2	46	45	91
From 35 to 40 years.....	5	6	11	80	60	140
From 40 to 50 years.....	6	14	20	152	192	344
From 50 to 60 years.....	18	15	33	201	219	420
From 60 to 70 years.....	20	25	45	180	216	396
From 70 to 80 years.....	16	18	34	185	187	372
From 80 to 90 years.....	8	5	13	64	60	124
Over 90 years	1	1	2	3	7	10
Total	83	90	173	979	1,035	2,014

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients admitted during the year ending September 30, 1901

DURATION OF INSANITY	Men	Women	Total
Under one month.	15	15	30
One to three months	22	22	44
Three to six months	24	23	47
Six to nine months	5	7	12
Nine months to one year	8	4	12
One year to eighteen months.....	11	5	16
Eighteen months to two years	10	.....	10
Two to three years	8	10	18
Three to four years	10	5	15
Four to five years	3	9	12
Five to ten years	8	12	20
Ten to fifteen years.....	5	5	10
Fifteen to twenty years	3	1	4
Twenty to thirty years.....	4	3	7
Unascertained	19	1	20
Total	155	122	277

TABLE No. 16

Showing period of residence in asylum of patients remaining under treatment September 30, 1901

PERIOD OF RESIDENCE	Men	Women	Total
Under one month.....	12	8	20
One to three months.....	36	22	58
Three to six months.....	20	15	35
Six to nine months.....	20	15	35
Nine months to one year.....	18	28	46
One year to eighteen months.....	37	33	70
Eighteen months to two years.....	48	29	77
Two to three years.....	39	68	107
Three to four years.....	162	146	308
Four to five years.....	94	51	145
Five to ten years.....	309	336	645
Ten to fifteen years.....	130	110	240
Fifteen to twenty years.....	62	81	143
Twenty to thirty years.....	133	133	266
Thirty years and upwards.....	10	31	41
Total.....	1,130	1,106	2,236

TABLE No. 17

Showing the occupation of those admitted during the current year and since October 1, 1888

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Professional:						
Clergy, military and naval officers, physicians, lawyers, architects, artists, authors, civil engineers, surveyors, etc.....	7	.....	7	71	7	78
Commercial:						
Bankers, merchants, accountants, clerks, salesmen, shopkeepers, shopmen, stenographers, typewriters, etc.....	10	.....	10	203	4	207

Table No. 17—(Concluded)

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Agricultural and pastoral: Farmers, gardeners, herds- men, etc.....	51	.....	51	677	2	679
Mechanics at out- door vocations: Blacksmiths, carpenters, engine-fitters, sawyers, painters, police, etc....	26	.....	26	402	.....	402
Mechanics, etc., at se- dentary vocations: Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc.....	17	.....	17	161	1	162
Domestic service: Waiters, cooks, servants, etc		18	18	24	1,160	1,184
Educational and high- er domestic duties: Governesses, teachers, stu- dents, housekeepers, nurses, etc.....		94	94	43	908	951
Commercial: Shopkeepers, saleswomen, stenographers, type- writers, etc.....		3	3	.....	13	13
Employed in seden- tary occupation: Tailoresses, seamstresses, bookbinders, factory workers, etc.....		4	4	11	112	123
Miners, seamen, etc.....	1	.....	1	27	.....	27
Prostitutes .....		.....	.....		1	1
Laborers	33	.....	33	636	.....	636
No occupation	8	3	11	142	145	287
Unascertained	2	.....	2	39	49	88
Total	155	122	277	2,436	2,402	4,838

TABLE No. 18

Showing the nativity of patients admitted during the current year and since October 1, 1888

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
California				2	1	3
Connecticut				14	8	22
Florida					2	2
Georgia					1	1
Illinois		1	1	5	3	8
Indiana				1	4	5
Iowa		1	1	2	1	3
Kansas					2	2
Kentucky					3	3
Maine				2	2	4
Maryland				5	56	61
Massachusetts	1		1	17	8	25
Michigan	1	1	2	14	8	22
Minnesota		1	1	1	4	5
Mississippi				1		1
Missouri				1	1	2
New Hampshire				3	2	5
New Jersey	2	1	3	12	9	21
New York	85	83	168	1,359	1,285	2,644
North Carolina				2	2	4
Ohio		1	1	4	2	6
Pennsylvania	6	5	11	62	48	110
Rhode Island	1		1	3		3
South Carolina				1	1	2
Tennessee				1		1
Texas				1		1
Vermont				11	6	17
Virginia	1	3	4	3	7	10
Wisconsin				2	6	8
Africa				1		1
Armenia				1		1
Austria				5	3	8
Bavaria				1		1
Bohemia				1	2	3
Canada	3	2	5	31	35	66
Denmark				1	3	4
England	3	3	6	73	75	148
France				15	5	20
Germany	2	9	11	169	187	356
Greece					1	1

Table No. 18—(Concluded)

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Holland	1	.....	1	4	9	13
Hungary	1	.....	1	5	3	8
Ireland	4	8	12	245	411	656
Italy	1	.....	1	17	7	24
Malta .....	.....	.....	.....	1	.....	1
Norway .....	.....	.....	.....	1	.....	1
Poland .....	.....	.....	.....	6	14	20
Russia .....	.....	.....	.....	7	1	8
Scotland .....	.....	1	1	10	14	24
Sicily .....	.....	.....	.....	1	.....	1
Sweden	1	.....	1	10	7	17
Switzerland .....	.....	.....	.....	11	1	12
Wales .....	.....	.....	.....	.....	2	2
United States	36	2	38	105	13	118
Nova Scotia .....	.....	.....	.....	1	.....	1
Unascertained	6	.....	6	185	137	322
Total	155	122	277	2,436	2,402	4,838

Of the total number admitted since the 1st of October, 1883, the parents of 44 per cent were both of foreign birth.

In 3 per cent the parentage on the paternal side was foreign, while that on the maternal side was native.

In 6 per cent the parentage on the maternal side was foreign, while that on the paternal side was native.

The records in this hospital prior to 1890 do not show the statistics required.

TABLE No. 19

Showing the residence by counties and classification of patients
admitted during the year ending September 30, 1901

COUNTIES	Public	Private	Total
Albany			
Allegany	24		24
Broome			
Cattaraugus			
Cayuga	30		30
Chautauqua			
Chemung			
Chenango			
Clinton			
Columbia			
Cortland	1		1
Delaware			
Dutchess			
Erie	2		2
Essex			
Franklin			
Fulton			
Genesee	12		12
Greene			
Hamilton			
Herkimer			
Jefferson			
Kings			
Lewis			
Livingston			
Madison			
Monroe	2		2
Montgomery			
Nassau			
New York			
Niagara			
Oneida	1		1
Onondaga	2		2
Ontario	35		35
Orange			
Orleans	10		10
Oswego			
Otsego			
Putnam			
Queens			
Rensselaer			
Richmond			
Rockland			

Table No. 19—(Concluded)

COUNTIES	Public	Private	Total
St Lawrence.....			
Saratoga			
Schenectady			
Schoharie.....			
Schuyler	12		12
Seneca	18		18
Steuben	49		49
Suffolk			
Sullivan			
Tioga			
Tompkins	25		25
Ulster			
Warren			
Washington.....			
Wayne	31		31
Westchester	1		1
Wyoming.....			
Yates	16		16
Soldiers' Home.....	6		6
Total	277		277

TABLE No. 20

Showing the residence by counties and classification of patients
remaining under treatment September 30, 1901

COUNTIES	PUBLIC		
	Men	Women	Total
Albany.....	60	89	149
Allegany.....	46	40	86
Broome.....			
Cattaraugus.....	1		1
Cayuga.....	103	77	180
Chautauqua.....	2	1	3
Chemung.....	35	30	65
Chenango.....			
Clinton.....		2	2
Columbia.....		10	10
Delaware.....		1	1
Cortland.....			
Dutchess.....		1	1
Erie.....	35	5	40
Essex.....	2	2	4
Franklin.....	10	4	14
Fulton.....	10	5	15
Genesee.....	29	21	50
Greene.....	3	1	4
Hamilton.....	1		1
Herkimer.....	6	7	13
Jefferson.....			
Kings.....		2	2
Lewis.....	5	1	6
Livingston....	17	20	37
Madison.....	3	2	5
Monroe.....	13	49	67
Montgomery.....	11	9	20
New York.....	116	104	220
Niagara.....	9	3	12
Oneida.....	2	1	3
Onondaga.....	27	27	54
Ontario.....	95	89	184
Orange.....	7	2	9
Orleans.....	20	17	37
Oswego.....	2	5	7
Otsego.....			
Putnam.....		3	3
Queens.....	15	17	32
Rensselaer.....	12	55	67
Richmond.....		7	7

Table No. 20—(Concluded)

COUNTIES	PUBLIC		
	Men	Women	Total
Rockland	1	.....	1
St Lawrence.....	.....	.....	.....
Saratoga.....	11	12	23
Schenectady	8	13	21
Schoharie.....	.....	.....	.....
Schuyler.....	37	26	63
Seneca.....	51	45	96
Steuben	124	87	211
Suffolk	6	2	8
Sullivan	1	.....	1
Tioga .....	.....	.....	.....
Tompkins.....	51	50	101
Ulster.....	1	17	18
Warren.....	1	4	5
Washington.....	.....	11	11
Wayne.....	58	46	104
Westchester.....	12	46	58
Wyoming.....	.....	.....	.....
Yates	21	36	57
Soldiers and Sailors' Home	29	.....	29
State patients	16	2	18
Total.....	1,130	1,106	2,236

APPENDIX

HISTORICAL REVIEW OF THE WILLARD STATE
HOSPITAL

In 1887 the superintendent of the then Willard Asylum for the Insane printed upon the press at that time owned by the asylum an historical account of the institution.

This contained a bird's-eye view of the buildings and grounds, of which the illustration contained in the present report is a reduced reproduction, and also printed a description of a number of the buildings, together with cuts showing floor plans and certain elevations and a general view of the principal grounds of the hospital. The plans, etc., will be left out of this report, but inasmuch as a number of years have passed since the data referred to was printed, and as I do not find this in any one place in any of the reports, I have thought well to include it in an appendix to the report for this year, and shall take the liberty of producing the text as formerly written and printed by the superintendent in 1887 without change. However, I wish also in this connection to call attention to the table which I add to the printed data referred to, which will show the weekly cost of the hospital for the various years from 1872 to 1886 inclusive, made by computing and adding to the original table the weekly cost of salaries, clothing and such other expenditures as we find upon the books of the institution, and which were not formerly charged to the weekly per capita cost, being paid for in an entirely different way. This matter of the per capita cost of the insane of the Willard Asylum has, as I find, been considerably misunderstood, but the matter is only of a similar kind to that which we find in other institutions where certain items are chargeable to one fund and others to another. Under the old system the board of trustees fixed the rate that was charged to the counties for the care of the insane in the institution from the several counties in the State, and outside of this State paid certain of the expenses, such as the salaries of officers and clothing, while in addition breakage and some other minor mat-

ters were charged in additional bills to the counties and as against the cost of maintaining certain individual patients. The result of this has been that outsiders often claim that the cost maintaining the insane at the Willard State Hospital was less years ago than now, although it was not taken into consideration that at that time the institution was supposed to care for only the chronic insane.

Since the 1st of June, 1890, this institution has been an institution for the reception of the acute insane from its own particular district, and to-day the percentage of acute cases in the institution is practically the same as at any of the other large hospitals of the State.

Some years ago I made an inquiry concerning the old admissions and I found, much to my surprise, that owing to the transfers that had been made to enable the State in filling vacancies where additional accommodations had been provided in the other hospitals patients belonging to each of the other districts had been removed as far as possible to the hospitals for those districts, and of the patients at the time mentioned in residence at the Willard State Hospital less than one-third of the patients in residence prior to June, 1890, remained in the institution. Of the remainder about one-half had been received by us upon transfers at different times from the other hospitals of the State, while the remaining one-half or one-third of the whole had been received by us upon original commitments from their homes or elsewhere in our own district. Several years having now passed, the divergence from the old conditions would naturally be greater than before, but notwithstanding this fact, owing to our being able to obtain better prices than in the earlier days upon staples and commodities, and our improved methods of handling business, etc., it is noteworthy that latterly, with one or two exceptions, the weekly per capita cost of maintaining the insane at the hospital has been as low or even lower than it was in the old days when the institution cared for the chronic insane alone. The 1887 report referred to is as follows:

WILLARD ASYLUM FOR THE INSANE

Subsequent to the creation and opening of the State Lunatic Asylum at Utica in 1843, the subject of increasing and improving the accommodation for the insane of the State of New York engaged the attention of the Legislature from time to time. In January, 1844, Dorothea L. Dix presented a memorial to the Legislature, representing the condition of the insane in county almshouses and other places as she found it on a personal inspection. In 1855 a convention of superintendents of the poor memorialized the Legislature to erect additional asylums. In the year 1856 a special committee of the Senate created for the purpose made a personal inspection of the asylums and poorhouses, and presented a report with recommendations to the Legislature of 1857. During this period and following it successive Governors of the State, the managers of the State Lunatic Asylum and its superintendent, Dr. Gray, as well as the State Medical Society, urged upon the Legislature the wretchedness and neglect that existed in the care of the insane in county houses and the necessity of enlarging the accommodations for the increasing number of the insane. While these various movements were continuous in respect to time they were not connected. The State did not act and the various suggestions were unheeded.

In the year 1863 the State Medical Society appointed Dr. Charles A. Lee, Dr. Sylvester D. Willard and Dr. George Cook a committee to confer with the medical committees of the Senate and Assembly on the subject of the "appointment of a Commissioner of Lunacy, whose duty it should be to examine personally into the condition of the insane confined in the public and private lunatic asylums and almshouses and report their condition to the next Legislature with such suggestions for their relief as may be deemed proper." In pursuance of this action the Legislature, by an act passed April 30, 1864, devolved upon the secretary of the State Medical Society, Dr. Sylvester D. Willard, the duty of procuring the information desired and furnishing a report. The law directed that a series of questions likely to elicit the greatest amount of information on the subject should be prepared, printed and transmitted to each county judge in the State:

*"It directed the county judge, on the reception thereof, to appoint a competent physician, a resident of the county, to visit the county poorhouse, or institution where the insane poor are kept, and to examine into the condition and treatment of the insane inmates, and to transmit the results of the examination.

* Report of Dr. Willard.

It directed me thereupon to condense the information so received, and report the same to your honorable body." Fifty-two physicians of as many counties furnished replies to the questions propounded, and the information received furnished the basis of the report and suggestions of Dr. Willard to the Legislature of 1865. In his message to the Legislature Governor Fenton, in calling attention to the condition of the insane poor, thus alluded to the forthcoming report of Dr. Willard:

"The Legislature of 1864 directed an investigation into the condition of the insane poor confined in the various county poorhouses. A report by Dr. Willard will be duly presented, showing the deplorable condition of this most unfortunate class. There are in fifty-five counties confined in poorhouses, or poorhouse asylums, not including New York and Kings, thirteen hundred and forty-five lunatics, nearly all of whom are incurable; many have become, and others are fast becoming, incurable from inefficient care and treatment. The time has arrived when legislative provision should be made. The propriety of establishing an institution for *incurables*—an institution that shall relieve county authorities from the care of the insane—should be deliberately considered.

"More than one-fourth of this number of insane are capable of some labor. To what extent that labor, organized and systematized, might be made productive in the maintenance of an institution, under well directed superintendence, is likewise worthy of consideration."

A bill was reported by the committee, of which Dr. W. H. Richardson was chairman, creating a second State lunatic asylum to be known as the Beck Asylum for the Insane.

Dr. Willard died April 2, 1865. In a biographical notice published in the transactions of the State Medical Society for 1866 Dr. Franklin B. Hough pays a deserved tribute to the work of Dr. Willard in investigating the condition of the insane poor, his energy in collecting information and his zeal in promoting the establishment of a new asylum for their care. His biographer remarks, "His death made a marked impression upon the public mind, and his prominent position [Surgeon-General of the State of New York] suggested a further mark of honor. The bill then in the Senate was amended, and became a law with the name changed to the Willard Asylum for the Insane."

The title of the bill as passed was: "An act to authorize the establishment of a State asylum for the chronic insane, and for the better care of the insane poor, to be known as the Willard Asylum for the Insane." Dr. John P. Gray, Dr. Julian T. Williams and Dr. John B. Chapin were appointed commissioners by Governor Fenton to locate and erect the asylum. In deciding

upon a location the commission was directed to "first seek for and select any property owned by the State, or upon which it had a lien," referring by implication to the State Agricultural College in the town of Ovid. Soon after their organization the commission adopted a proposition that the plan of the Willard Asylum should comprise a central administration block; wings for the hospital care of excited patients and such others as required for any reason frequent medical visitation and supervision, and groups of detached blocks for the reception and care of harmless, industrious and manageable patients.

The commission having obtained a title to the State Agricultural College in December, 1865, submitted plans to Governor Fenton in January, 1866, which were subsequently approved by him. At this period Dr. Gray withdrew from the commission and Dr. Lyman Congdon was appointed in his place. During the summer of 1866 a contract was made for the erection of the center building, one section of the north and south wings, the buildings in the rear of the center, and work was commenced.

In accordance with powers conferred upon the Governor, James A. Bell of Jefferson, Judge Allen of Washington, Sterling G. Hadley, John E. Seeley, James Ferguson of Seneca, and Genet Conger of Ontario, were appointed trustees of the asylum in 1867.

In January, 1869, Dr. John B. Chapin was appointed medical superintendent, and accepted the office April 1st.

The title and the several sections of the organic act of the asylum indicate the plain intent of the Legislature to change the system which was then in existence of providing for recent cases in a State asylum and chronic and incurable cases in poorhouses. The act creating the Willard Asylum required that all cases, both recent and chronic, of the indigent class needing the treatment or care of an asylum for the insane should, on the completion of the new asylum, be placed under State supervision and custodial care. The Willard law indicated a great advance of public sentiment toward the better care of the insane poor. The plans prepared by the commission contemplated the segregation of patients and classes according to their condition, and a plant which would permit the economical enlargement of the asylum by the erection of additional blocks. While the State had thus entered upon a comprehensive system for the care of the insane, plans were adopted which were a decided departure from those which previously had been regarded as most suitable and even essential. Three years before the asylum was ready for occupation the manner in which the purpose of the Legislature was to be executed was foreshadowed in the following language, which may be reproduced here:

"The plan of buildings at Ovid comprises a hospital for the paroxysmal, excited and grossly demented, with groups of detached blocks, plain and inexpensive in their construction, for those whose condition is such as to permit of their being employed in agricultural, horticultural or other industrial pursuits, with benefit to themselves and the asylum. It is believed that the plan of building here indicated will materially reduce the cost of construction, allow of a system of classification and general management which will considerably diminish the cost of maintenance, and at the same time that the health and happiness of the patients will be in the highest degree promoted.

"This plan also permits of expansion in such a manner as to obviate the objections to a large establishment under one roof. The institution is, in short, designed to supersede the miserable system of providing for the chronic insane in the poorhouses, and by placing them in an establishment adapted to their condition, and care for them in accordance with medical and humane ideas, develop their industrial capacities and demonstrate the fact that they can be properly provided for at a cost per week which will place such care within the reach of every county, thus opening the way to the complete abandonment of county house receptacles for such of the chronic insane as may need the custodial appliances of an asylum for the insane.

"For the first time the important principle is recognized that the chronic insane poor are equally with the acute recent cases entitled to proper care and treatment under State supervision, and any State which neglects to provide for all of this unfortunate class by the establishment of a humane, comprehensive system of care is guilty of injustice and partiality."

Three principal objects were sought to be accomplished:

First—The care of the insane of the chronic and incurable class in a State institution and their transfer from county poorhouses to State supervision;

Second—The modification and change of the usually approved hospital plans, so as to reduce the cost of construction materially, and the erection of supplemental or detached buildings for the care of mild and harmless cases; and

Third—The aggregation of numbers in order to divide the cost of support among a large number, so that the average charge might be reduced.

The commissioners having reported the buildings in course of construction so far advanced toward completion as to be in readiness for occupation during the year, the Legislature in May, 1869, abolished the commission, devolved its powers and duties upon a new board of trustees, which was created to supersede the board first appointed. The new board consisted of John E.

Seeley, Sterling G. Hadley, Samuel R. Welles, William A. Swaby of Seneca, Darius A. Ogden of Yates, George J. Magee of Schuyler, Francis O. Mason and Genet Conger of Ontario.

In September a circular was issued to the superintendents of the poor announcing that the asylum would be ready for the reception of two hundred and fifty patients on the 12th of October. Applications for more than five hundred patients were received. On the 13th October the first patients were received, three of whom were brought in chains.

In 1870 the Legislature made an appropriation to extend the south wing and to alter the Agricultural College building for the accommodation of patients, known thereafter as the "branch." In 1871 the south wing was extended and a group of five detached blocks was commenced, which were completed in 1872. The second group was occupied in 1876, the third group in 1877 and the fourth group in 1880.

As it had been the policy of the trustees to make no discrimination in the condition of patients to be received, and as they have encouraged the transfer of such cases as would seem to afford the greatest relief to county institutions, there has been, as was to be anticipated, an unusual accumulation of patients in an advanced stage of enfeeblement—epileptics, paralytics and others bedridden from various causes of physical impairment—all requiring much personal attendance day and night. In 1884 the trustees recommended that new buildings be erected for the special and better care of this group of cases, numbering about one hundred of each sex. The Legislature of 1886 authorized the erection of a group of detached blocks as an infirmary for men, and a further modification of the building known as the "branch," to be hereafter used as an infirmary for women. The principal features of the one-story infirmary wards are the allotment of the space to day wards and large dormitories, with a few single rooms, large associate dining-rooms and an administration block, all calculated to furnish an efficient service both night and day.

Additions of land have been made to the original purchase from time to time. The farm of the asylum now comprises nine hundred and thirty-one acres.

The total expenditure for erection of buildings of all kinds, land, furniture, water-works and all purposes, except salaries and maintenance, has been \$1,489,841. The capacity of the asylum is 1,800, and the average cost of construction, equipment, land, improvements, changes and subsequent modifications has been \$827 per patient. The whole number of patients admitted from the opening of the asylum October 12, 1869, to September 30, 1886, was three thousand nine hundred and sixty-four.

The following table shows the average cost of support for a period of fourteen years, excluding salaries of the staff of medical officers and clothing.

The table is of interest in showing the relation that numbers bear to the cost of support, and how much the products of a large farm and the labor of patients may reduce it:

Weekly cost, less salaries, clothing and certain other expenditures				* Aggregate cost	
1872....	Daily average of patients.....	564	Weekly cost.....	\$3 15	\$3 65
1873....	Daily average of patients.....	727	Weekly cost.....	3 09	13 611
1874....	Daily average of patients.....	827	Weekly cost.....	3 09	3 575
1875....	Daily average of patients.....	938	Weekly cost.....	2 96	3 384
1876....	Daily average of patients.....	1,076	Weekly cost.....	2 83	3 240
1877....	Daily average of patients.....	1,227	Weekly cost.....	2 87	3 242
1878....	Daily average of patients.....	1,340	Weekly cost.....	2 71	3 116
1879....	Daily average of patients.....	1,430	Weekly cost.....	2 63	3 614
1880....	Daily average of patients.....	1,565	Weekly cost.....	2 72	3 073
1881....	Daily average of patients.....	1,695	Weekly cost.....	2 67	3 064
1882....	Daily average of patients.....	1,759	Weekly cost.....	2 64	3 097
1883....	Daily average of patients.....	1,748	Weekly cost.....	2 65	3 006
1884....	Daily average of patients.....	1,790	Weekly cost.....	2 61	2 982
1885....	Daily average of patients.....	1,835	Weekly cost.....	2 37	2 756
1886....	Daily average of patients.....	1,835	Weekly cost.....	2 26	2 604
1887....	.....	.....	.....	2 26	2 646
1888....	.....	.....	.....	.....	2 827
1889....	.....	.....	.....	.....	2 597
1890....	.....	.....	.....	.....	2 725
1891....	.....	.....	.....	.....	2 851
1892....	.....	.....	.....	.....	3 04
1893....	.....	.....	.....	.....	2 98
1894....	.....	.....	.....	.....	2 67
1895....	.....	.....	.....	.....	2 835
1896....	.....	.....	.....	.....	2 97
1897....	.....	.....	.....	.....	3 11
1898....	.....	.....	.....	.....	3 019
1899....	.....	.....	.....	.....	3 095
1900....	.....	.....	.....	.....	2 966
1901....	.....	.....	.....	.....	3 06

The following persons have served as trustees of the asylum since its opening:

John E. Seeley, reappointed 1869; resigned 1872.

Genet Conger, reappointed 1869; resigned 1877.

Sterling G. Hadley, reappointed 1869; term expired 1896.

Darius A. Ogden, appointed 1869; died May, 1889.

George J. Magee, appointed 1869; resigned 1884.

Samuel R. Welles, appointed 1869.

William A. Swaby, appointed 1869; term expired 1882.

Francis O. Mason, appointed 1869; resigned 1894.

George W. Jones, appointed 1873; died October 17, 1886.

James F. D. Slee, appointed 1877; term expired 1882.

Diedrich Willers, Jr., appointed 1882; resigned 1889.

S. H. Hammond, appointed 1882; still in office.

A. S. Stothoff, appointed 1884; still in office.

* Please notice that the last table showing the "aggregate cost" for maintaining patients at the hospital, made by adding the cost for clothing and salaries, etc., which was not formerly included in this per capita, has been added to the text quoted from the original historical review, and is new matter. Weekly per capita cost, inclusive of all items, can be found upon the books of the hospital.

† Eighteen months.

*James A. Flanagan, appointed 1888.

O. G. Shearman, appointed 1889.

S. G. Van Vleet, appointed 1890.

Henry Peterson, appointed 1895.

Prof. J. L. Morris, appointed 1895; still in office.

William J. Pollard, appointed 1897; still in office.

John H. Osborne, appointed 1897; still in office.

Martin L. Allen, appointed 1897; term expired 1899.

Mrs. C. S. Mongin, appointed 1897; still in office.

A. B. Houghton, appointed 1900; still in office.

Dr. Chapin resigned the office of medical superintendent September 1, 1884, to accept the appointment of physician-in-chief of the Pennsylvania Hospital for the Insane, and was succeeded by Dr. P. M. Wise, formerly the senior medical officer.

On the creation of the Willard Asylum, its object and plans became the subject of widespread professional discussion, but its practical results have taken the place of speculation and theory. It has been demonstrated that it is practicable to reduce the usual cost of construction of asylums for the insane and their subsequent maintenance, to abolish all mechanical forms of restraint and to enlarge their personal liberty and means of employment. A marked modification of the views that had been entertained in regard to plans of asylums and the policy of the State toward the indigent insane has taken place. Not the less remarkable and among the secondary respects has been the decided improvement in the condition of the county almshouses, due in part to the removal of a disturbing and troublesome class. While the plans that were adopted may not be exactly such as would now be recommended with the experience of eighteen years, they however embody ideas and suggestions which, it will be found, mark a new departure, and will work important changes in asylums to be hereafter erected.

NOTE—Dr. Wise resigned early in 1890 to accept the superintendency of the St. Lawrence State Hospital at Ogdensburg, N. Y., and was succeeded by Dr. Charles W. Pilgrim, for several years senior medical officer at Utica, N. Y., who, after a service of more than three years as superintendent of this hospital, left May 3, 1893, to accept a like place of confidence at the Hudson River State Hospital, and was succeeded in office by Theo. H. Kellogg, M. D., formerly Superintendent of New York City Asy-

* Please note that the data regarding the appointment of the managers since 1884 has been added to the old table, and such particulars are given as could be easily ascertained without reference to the Secretary of State's office to find how the incumbents of the various positions noted left, that is, whether by death, resignation or promotion of office, etc.

(The note for the preceding table and the above note are added as new matter to the reprint of the old historical review or account of the hospital, and these additions are made in this way rather than to rewrite the whole of this account, for which there would not be sufficient time to enable us to incorporate the matter in the present report.)

lum for the Insane. Dr. Kellogg entered upon his duties as Medical Superintendent May 12, 1893. Dr. Kellogg resigned November 1, 1895, and was succeeded by Dr. William Mabon of the Utica State Hospital. Dr. Mabon has served for ten years as assistant physician and was entirely familiar with the workings of the State hospital system. Dr. Mabon resigned December 1, 1896, having been appointed Medical Superintendent of the St. Lawrence State Hospital at Ogdensburg. Dr. Wm. Austin Macy, Superintendent of Manhattan State Hospital, East, was appointed to succeed Dr. Mabon.